The **essential** magazine for Amiga enthusiasts

AMIGA SHOPPER

Issue **62** May 1996 **£4.25** US$8.95 ● Guilders17.50

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CanDo 2.51

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Shopper**Reviews**



- Epson EPL-5500: An amazing new 600dpi laser printer for the price of an inkjet.
- Wordworth 5: The latest version comes under our scrutinous eye.
- Loom: A brand new way of making music designed for those with some programming experience.
- Aural Synthetica: Powerful sample creation, but is it too complicated for its own good?.
- MasterISO: The ability to create compact discs.
- Rexecute: A program that can transform your use of the Amiga's inbuilt ARexx language.
- MacroForm: Organic modelling tool for LightWave.



Shopper**Tutorials**

Introduction to CanDo
To get you started with our amazing Coverdisk, we explain all about its features and how to use them.

Music
The power of sound samples and how to make the most of them in your musical creations.

Comms
A detailed look at IRC, the advanced features it offers and why it can be used for more than just chatting.

HiSoft BASIC 2
Our second installment explains the use of tag lists.

Amiga DIY Part 2!

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The **essential** magazine for Amiga enthusiasts

AMIGA SHOPPER

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Inside issue

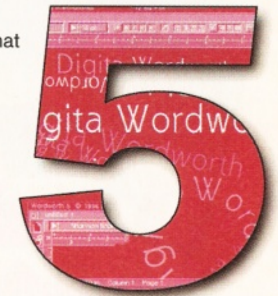
Amiga Technologies are showing off the prototype of their new machine, the "Super Amiga" at the WOA. Be there!



Create anything. There are no limits. Rather bold, you may think, but our claims for the power of Inovatronic's excellent authoring package, CanDo 2.51 are perfectly true! Which is why the complete and unrestricted version of CanDo 2.51 can be found on our main Coverdisk this month. And just in case you are still not aware of how powerful the program is, there are six pages of instructions and tips spread throughout this issue. We have plans for a further tutorial series for the next few issues too.



Excellent news has just been announced by Amiga Technologies. They will be showing off their brand new Amiga at the World Of Amiga show. This new machine has a quad-speed CD-ROM drive, it uses a 680EC30 40MHz main processor, it features two SIMM sockets and has a flexible expansion bus too. We don't have any details about the price yet – but get down to the WOA show and you can ask Amiga Technologies for more details yourself! The new machine will be on display at the CeBit show in Germany too – unfortunately, we go to press just before that show, but we will have a full report next month. There is a World Of Amiga show guide on page 24 to give you a taste of what to expect; and if you fill in the special voucher on page 27 and hand it in to the Future Publishing stand you could win an Amiga Surfer pack – another good reason to attend the show.





Back to the issue, there's the second part of our Amiga DIY feature on page 28. We want to make sure that you really are getting the most out of your machine and its peripherals. Loads of readers call up with similar problems, many of which can be solved easily with a little bit of advice; which inspired us to write this feature. We hope it clears up a lot of your problems!

Digita's excellent word processor, Wordworth 5 is reviewed this month, along with a whole bunch of other new Amiga hardware and software. And don't forget our tutorials. Read on and enjoy! ■

Sue Grant
Sue Grant
Editor

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E-mail: davetaylor@futurenet.co.uk

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Turn the page for the contents of issue **62**

CLOCK CARTRIDGE

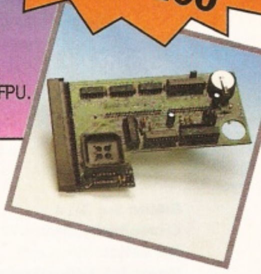


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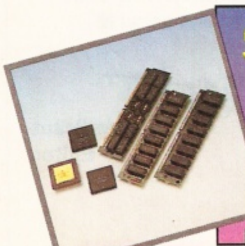
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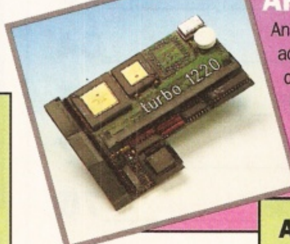


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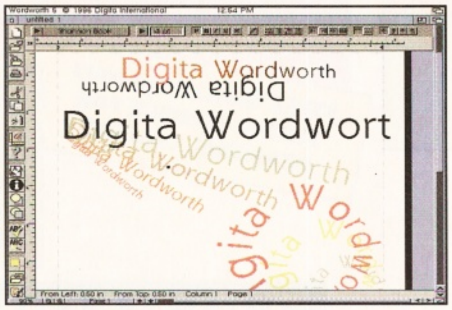
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AMIGA SHOPPER

ShopperFeatures



The Epson EPL-5500 offers quality printing at a bargain price. It's nice and compact too.



Wordworth 5 is quicker and smoother in operation than its predecessors.

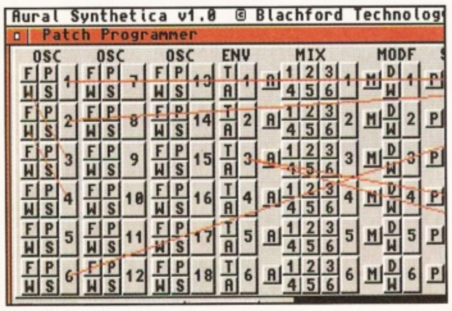
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Discover whether Aural Synthetica can bring full synthesizer power to your Amiga.

You can do

Pages 8 and 20



Competition

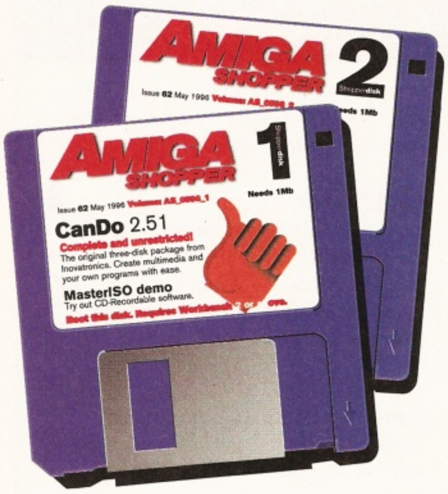
Win!



Shopper**Disks**

Another month and another excellent selection of programs on our disks. We have over 6Mb for you:

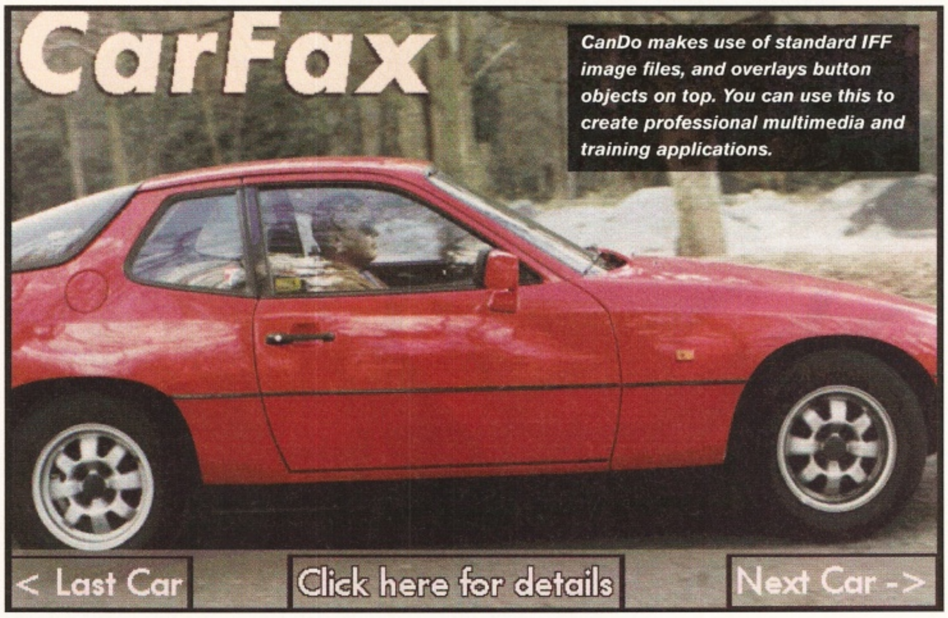




Coverdisks

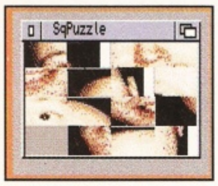
CanDo 2.51

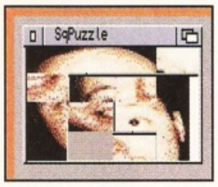
Not only is the full version of the powerful authoring program CanDo 2.51 on our Coverdisks, but there's also a demo of MasterISO and loads more demos and Shareware too!



CanDo makes use of standard IFF image files, and overlays button objects on top. You can use this to create professional multimedia and training applications.

"Anyone from a **complete** novice to a coding expert can write real Amiga programs."





Above, top and below: With full AGA graphics support, you can create your own Amiga-friendly games and share them with your friends, or even sell them: royalty free.



CanDo is a very powerful Amiga authoring tool. It is unlike any other programming system you have seen; it combines incredible power with total ease of use. With CanDo 2.51, anyone from a complete novice to a coding expert can write real Amiga programs quickly and easily. And now you can try this impressive program for yourself, because we are giving away the full version of CanDo 2.51 free on our Coverdisks this month!

We reviewed CanDo 2.51 way back in issue 33 of Amiga Shopper, and we said; "CanDo takes away all the programming headaches, leaving you to get your creative juices flowing and actually make something quickly and easily".



CanDo programs are totally Amiga friendly. A CanDo program can make use of standard image files and animations created in Deluxe Paint or Personal Paint, and use sound effects created with a sound sampler. A CanDo program can look exactly like every other application, using standard requestors and gadgets – the only difference being that you will have written the CanDo program totally by yourself.

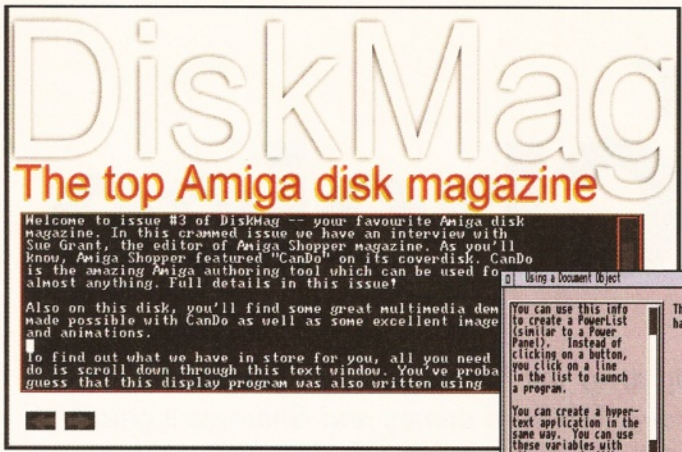
CanDo makes it easy to write all kinds of programs. Its unique combination of a "point and click" interface and a powerful scripting language means you can choose to

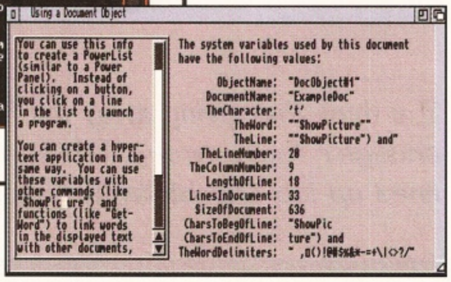
Dodgy disk?

To avoid errors when installing to floppies, ensure that your destination disks are of high quality. If an error occurs, try re-booting and using a different spare disk – the majority of errors are caused by faulty destination disks.

If your Coverdisk absolutely refuses to work and you are certain it is faulty, please return it, along with an S.A.E., to the address below. Please do not send faulty disks to the Amiga Shopper offices.

Amiga Shopper Coverdisk
(insert the name of the disk),
TIB plc, TIB House,
11 Edward St., Bradford BD4 7BH.





Left: ***Using the document facilities of CanDo you can spread the word by creating your own disk magazines. Combine text, graphics and sound samples to create an easy-to-use diskmag.***

Right: ***Each word in a CanDo document can trigger a new event, which means you can create your own Hypertext style documents.***

write as few or as many lines of code as you want. To start with you can use the icons to create the program automatically. Almost. When you gain confidence you can then start writing scripts and start to take full control over your Amiga hardware.

With CanDo, you can create many different programs, like those listed below.

• Multimedia programs

Use CanDo to combine graphics, animations and sounds into a single multimedia application. Give copies to your friends or record the final project to video tape.

• Workbench utilities

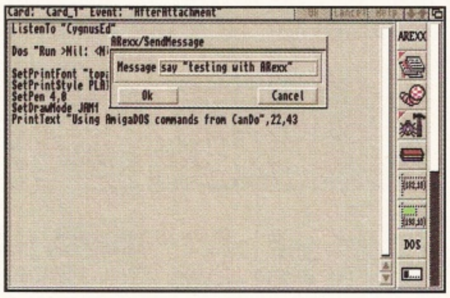
With a powerful scripting language, file-handling capabilities and a totally Amiga-friendly approach you can create powerful applications.

• Games

CanDo is perfect for creating games such as complicated graphic adventures or desktop toys. With the program's extensive graphics and sound support, you can play back several animations on screen at once with a synchronised soundtrack.

• Application software

Don't let CanDo's easy-to-use interface put you off. The program has plenty of power under its bonnet, with built-in database support and maths routines. You can create your own personal information manager or bank account monitor.



With CanDo you can really start to make use of ARexx, adding features to existing programs or even writing new ARexx applications!

• Programming utilities

CanDo is also a powerful prototyping tool for dedicated programmers. Create a "front end" for your Shell-based applications, or anything with an ARexx port. You can even write programs to control other applications such as Art Department.

• Disk magazines

CanDo has full support for text documents, plus user-defined buttons and gadgets. Create your own disk magazines which will run even without CanDo present.

CanDo is such a powerful and versatile program that we can't possibly cover every aspect of it on two pages, so we have investigated its features in much more detail in our special feature on page 20. Plus, we will be running a six-part CanDo tutorial from the June issue onwards, to make absolutely sure that you get the most out of our Coverdisk. And don't miss our bargain upgrade offer on page 23! ■

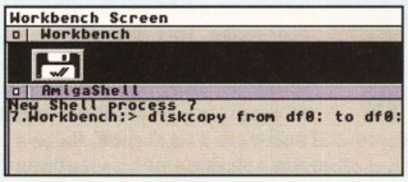
Beginners, look!



Before using either of this month's Coverdisks, please be sure to back them up – just in case. Simply follow the easy instructions below.



1 ***Boot up from your Workbench disk or partition, double-click on your Shell icon – to be found in your System Drawer.***



2 ***If you only have one disk drive, type in the following line and then press Return.***

```
Diskcopy from DF0: to DF0:
```

If you have two drives, place the Coverdisk in DF0: and a blank in DF1:, then type in this line instead:

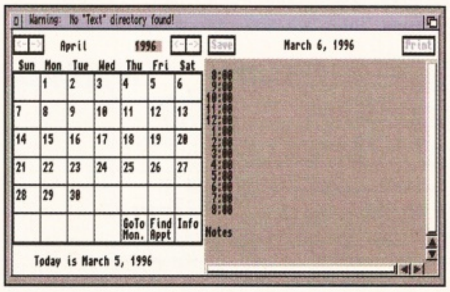
```
Diskcopy from DF0: to DF1:
```

3 ***Follow the on-screen prompts and remember that the Coverdisk is the source disk and the blank is the destination.***

4 ***If you used the two-drive method, remember to rename the copy by clicking on its icon and pressing right-Amiga r.***

5 ***If you have two drives, you can also copy the disk from Workbench by dragging the Coverdisk icon over the destination disk's.***

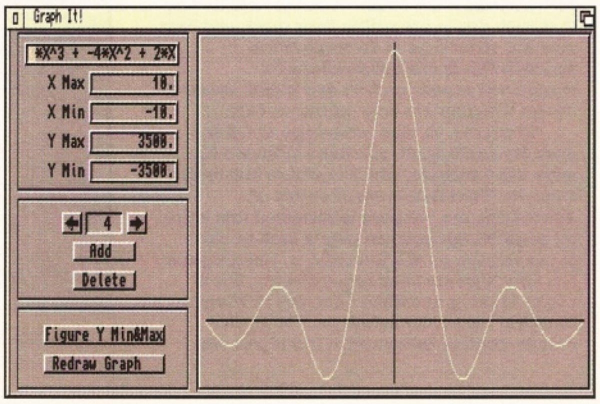
6 ***Then place either of the Coverdisks in DF0: and reset the Amiga to boot it. It is best to boot disk 1 (or the Subs disk if you're a subscriber). This will let you install all the disks to either floppy or hard drive.***



CanDo offers full support over the Amiga's facilities. You can create applications which run on the Amiga Workbench or open their own screen – the choice is yours.

CanDo has all the power you need to create your own Amiga application software. Everything from mathematical graphing programs to home budget systems (with full on-line help facilities) are possible.





Shopper Choice



You think that giving away the full CanDo 2.51 program is enough? You're wrong. We have demos and Shareware galore lined up too. ***David Taylor*** *explains.*

There's no point pretending otherwise. This month's Coverdisks are simply fabulous. They boast over 6Mb of programs; in addition to the commercial software and demos, there's also a stunning selection of applications and utilities from the PD world. Admit it. You're impressed.

ApplicationZone

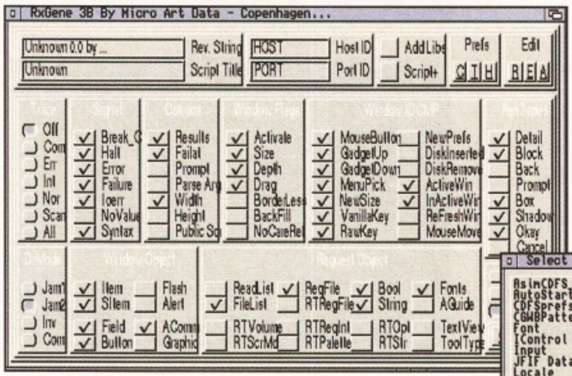
RxGene 3

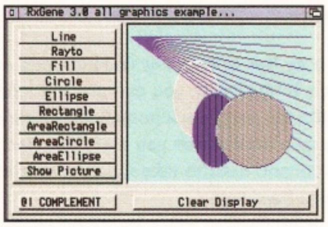
Author: Kare Johansson

There are few serious users of the Amiga who can deny the power of ARexx. It's a useful language that can be used to perform repetitive tasks or communicate between programs. Many commercial programs have ARexx support and you can find lots of new scripts written to take advantage of this.

However, there is no ARexx-specific editor supplied with the Amiga, nor any way of compiling ARexx scripts so that they can be executed. RxGene 3 enables you to specify parts of the tricky code that you want within an ARexx script. It then imports that information from its own GUI into a specially-created editor which can position the scripts as you need them. You can then fill out this skeleton to complete the script. When it's finished you can compile the script. As with Rexecute, the new ARexx compiler from Horizon (reviewed on page 43), the scripts still need Rexxmast to run, but what results you can achieve!

A huge thanks to the author for sending this program in so that AS readers can take advantage of it.







RxGene 3 (far left) can help you generate ARexx code and then compile it to create programs like these two (above and left). It shows how much more you can do with ARexx than just create simple scripts.

Blacks Editor

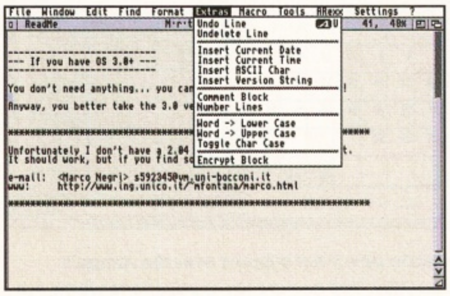
Author: Marco Negri

Last month, Blacks Editor was awarded a Star buy in our Internet Select section, this month we just had to give it to you. This is a new text editor which has features galore, and is ideal for creating documents or editing scripts. This version of the program requires Workbench 3, but a Workbench 2 version is in development.

Blacks Editor has built-in ARexx support that gives you options to count and save blocks as well as record and use your own macros, so repetitive tasks can be carried out automatically.

Of course, there are also many other features included in the program, from the find facility and the conversion of characters to and from cases, to paragraph formatting and the in-built document encryption for sensitive data.

It's astonishing to see a first release of a program like this offering so many advanced options. There are now quite a number of

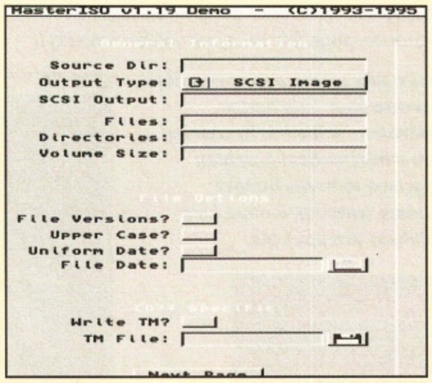


Blacks Editor is a new text editor with ARexx support and masses of features.

MasterISO demo

The last few years have seen a remarkable price drop in recordable CD-ROM drives. Although they will never have mass appeal to home users, small businesses are now finding that such drives are within their reach and they give the advantage of cross-platform accessibility. Some submissions for magazines appear on CDs and entire issues of Amiga Shopper are now stored on CDs.

Of course, to take advantage of CD-R, even for audio work, you need software to drive the hardware, which is where MasterISO steps in. From Asimware, creators of AsimCDFS, the program is reviewed this issue on page 45, but you can take a look at our demo version on the Coverdisks. The program has very high machine requirements, but if you're looking at cutting CDs, you're likely to have the necessary hardware. For further details, contact Blittersoft ☎ 01908 261466.



MasterISO offers Amiga owners the chance to cut their own compact discs.

different Freeware and Shareware text editors available, but Blacks Editor is sure to find an audience.

UtilityZone

MultiSample

Author: Graham Dean

File formats are a bit of a pain. It doesn't matter what medium you work with: documents, pictures or sounds. They are all available in different formats or even come from different platforms. The problem is that most applications can only deal with one or two types of format. So what do you do if you have a sound sample you want to use, but your editor won't load it? You use MultiSample, of course.

This utility has an obvious GUI with the input and output files and formats easily chosen. It gives you greater compatibility for sound files and music packages.

CRSnap

Author: C. R. Hahn

Taking screenshots has always been pretty much the job of Quickgrab. However, the problem with Quickgrab is that it doesn't take any notice of any previous shots from earlier uses so that it overwrites earlier files.

CRSnap overcomes this. It is a screengrabbing commodity that enables you to specify keys and save directories, but which most importantly will not overwrite earlier files. It's also remarkably compact.

TechnicalZone

XFD

Authors: Various

This package is a collection of libraries and sub-libraries together with CLI commands that give you access to de-pack just about every type of crunched file that the Amiga uses.

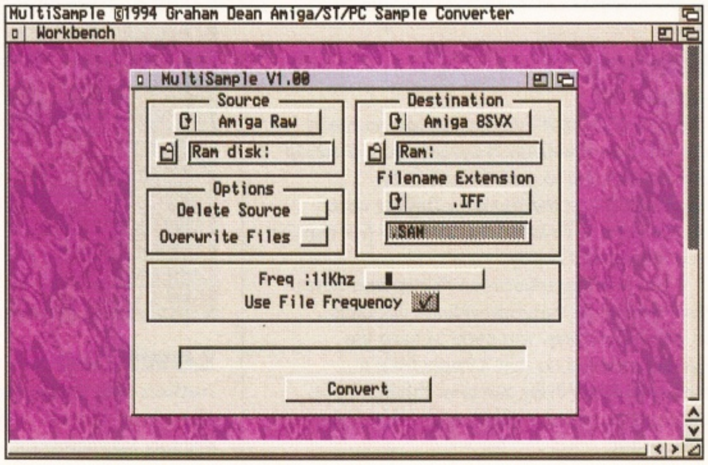
There are so many different types of packers used that there is no way you could have every single package (even I don't't!), but XFD enables you to unpack them all and remarkably easily. Simple knowledge of the Shell is all that's needed.

Guru 3

Author: Emiel Lensink

OK, hands up anyone who's never had a guru meditation. Thought so. They are supposed to be there as a guide to the fault to let you know what went wrong, but the fact is that not many people actually know how to interpret the eight figure numbers. Guru 3 is the solution; tell it the number and it will report, in English, the fault.

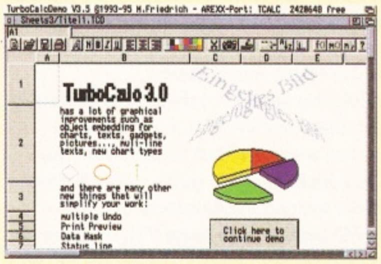
MultiSample is an accessible utility that can convert sound samples for you. This picture was taken using CRSnap – the new screengrabber.



TurboCalc 3.5 demo

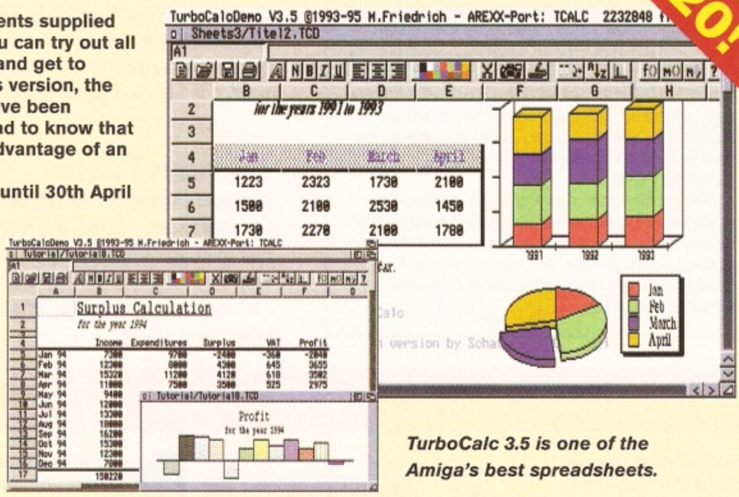
Save £20!

TurboCalc has become one of the Amiga's best spreadsheet programs. The interface is configurable and inserting functions into a cell is simple. Any data can then be displayed in a variety of visual manners using the graph functions. An additional boon for Digita users is that Wordworth 5 (see page 36) can import spreadsheets directly on to the Wordworth page.



There are full documents supplied with our demo so that you can try out all of TurboCalc's functions and get to know the program. In this version, the save and print options have been disabled, but you'll be glad to know that readers of AS can take advantage of an exclusive upgrade offer.

For a limited period (until 30th April 1996), you can save £20 off the retail price of £49.99 and get the full version for only £29.99. Digita is the exclusive worldwide distributor of the English version of TurboCalc and provides technical support to its registered users.



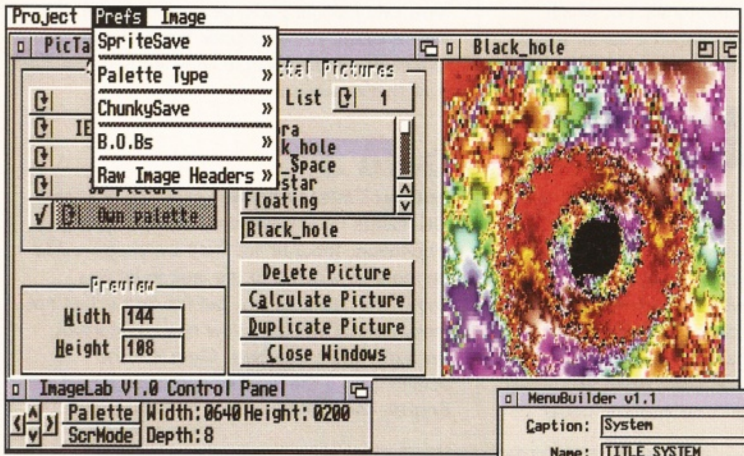
TurboCalc 3.5 is one of the Amiga's best spreadsheets.

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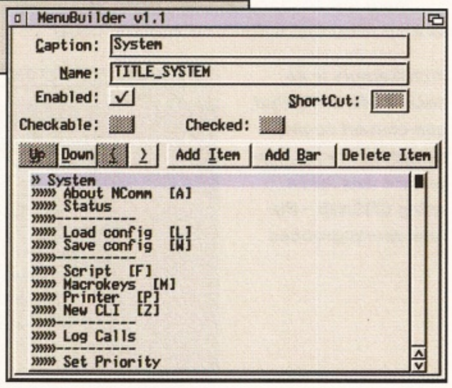
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Left: ***PLab is an image processor for programmers.***



Below: ***Another utility for programmers, MenuBuilder generates code for menus.***

Floppy

Author: OR

This is a utility that I mentioned last month in our PD Select section. It enables you to create disks according to a new system; an improvement on the trackdisk.device, which enables you to fit around another 10 per cent on to a normal DD floppy.

The difference between Floppy and other disk systems is that it provides a bootable version. Obviously, you need to have the system installed so that it boots from a standard disk initially, but after the first boot, the system is kept in RAM, even when you soft reboot.

Disk contributions

This month's disks were compiled using files from Aminet and from Walton's Mountain BBS (☎ 0181 891 5730), and with the help of the authors of the programs.

If you would like to contribute to a future disk, whether you have a full application, utility, 40K demo, clipart, font, 3D object, or even a module, send it to:
David Taylor,
Amiga Shopper Coverdisk Contributions,
30 Monmouth Street, Bath, Avon BA1 2BW.
Please only send the minimum distribution archive. Also, please do not powerpack (or similar) any files because it detracts from the archiving.

LowFrag

Author: Eric Sauvageau

All computers tend to face the problem of memory fragmentation, where one small file left lying around in memory by a program causes problems by separating two large blocks, so that a new program cannot access the available memory as a large block. There is no solution to the problem, but there is LowFrag. LowFrag improves the ordering of your memory so that small files are kept out of the middle of memory blocks. It will help solve some memory problems.

CenterTitles

Author: Massimo Tantignone

This little hack adjusts the titles in windows so that instead of appearing shunted to the side, they centre themselves. It's a small difference, but one that makes your Workbench look a great deal neater.

File Size and Drawer Size

Author: Robert Simpson

These two programs add themselves to the tools menu on Workbench and enable you to get real sizes of multiple files or drawers.

ProgrammingZone

We have a treat for programmers this month. Not only does the ProgrammingZone contain the code that accompanies our HiSoft BASIC tutorial (see page 58), but there are also two utilities to make your life dreamy!

MenuBuilder

Author: Adam Dawes

This is a utility designed for programmers who work within the Intuition environment. It enables you to design menus from within a GUI and then generates the source code for inclusion in your program.

This version is its initial release and only supports C, but the author has plans to extend it further based on feedback – so don't forget to get in touch with him.

PLab

Author: Robert Simpson

This is a package designed for programmers who need to incorporate images into their work. It can convert pictures into raw data for you as well as add some compression and perform a variety of other useful, image-related tasks. The documentation explains and details all the options.

InformationZone

As always, the InformationZone provides you with details of User Groups and PD Houses. We update it with new entries every month, but we are still receiving some entries on paper. Please send in your text as ASCII on a disk – it makes our life so much easier!

While this section of the disk is extremely popular, there are limits to the amount of information we can afford to supply on the disk. To supplement the guide, you will have doubtless noticed the launch of our new Purely PD section (see page 77), which is an advertising section specifically for the PD so that you can find what you are looking for easily and quickly. ■

Subscribers disk

Subscribing to your favourite magazine doesn't just mean saving money off the cost of each issue. Nor simply getting an exclusive newsletter with special subscriber discounts. And it doesn't end with the extra money savings from our mail order either.

If you haven't guessed, the big disk next to this is a hint. Yes, every month we produce a third disk packed with an additional 3Mb of fantastic programs, exclusive to AS subscribers.



This month, for instance, there's the complete Fractal Pro package which is one of the Amiga's most powerful fractal generators. There's also the new version of MagnifiCAD, the computer-aided design program. CGWBPattern is a superior update for the WBPattern preferences. Then, there's another four supreme packages too.

So, the question is, how do you take advantage of all these exceptional offers? Very easily. All you have to do is pick up the phone and dial our subscription hotline on ☎ 01225 822511. Give them some money and experience the wonder of being an Amiga Shopper subscriber.

Shareware notice!

Remember that a number of the programs on our Coverdisks are some form of Shareware. Amiga Shopper has compiled both disks with the help of the authors, who have received no fee from us.

So, if you keep and use these programs, you *must* register. Some people only want a postcard, so *please* put in the effort. They did when they created the program.



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NEW

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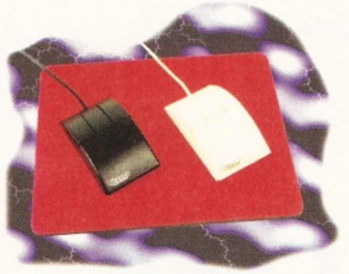
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X-LINK 28.8k	£219.99	£259.99

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News

AT show off new Amiga prototype; special hard drive offer; SX32 upgrade for CD32; Siamese prices; PPaint update and more!

New Amiga model unveiled by AT at CeBit

At last, it's the Amiga that we all wanted. Since Amiga Technologies were established they have been bombarded with requests from Amiga owners for new machines. We've all been hankering after a faster, more stylish and more expandable machine that doesn't cost the Earth (or two and a half grand to be more exact.

Now, at CeBit '96 (one of the world's largest computer fairs), Amiga Technologies have made their response – the Amiga Mind Walker. Don't worry, the lame name is likely to be changed. The prototype model on display is quite a departure from the normal styling we come to expect from the Amiga. Gone are the beige tones and the wedge-like shape of the A1200 and even the boxiness of the A4000 and the other big-box machines. The new Amiga is now a silver, svelte and decidedly futuristic-

"Gone are the beige tones and the wedge-like shape."

looking thing. Starting from a square base the casing gradually curves toward the top to create an arch. It also has a detached keyboard.

However, more important than cosmetic changes, are the changes made inside. Not only is the machine faster than a standard A1200, thanks to its 680EC30 processor, it is infinitely more expandable due to a new modular design. The motherboard features twin SIMM sockets for fitting up to 128Mb of RAM without the need for memory cards.

The most innovative feature of the machine is its expansion bus which can except standard Amiga Zorro slots and PCI ones. This means that you can take advantage of existing Amiga cards, cheaper PC peripherals and the new PowerPC cards. The great thing about the machine is that individuals can walk into a store and choose the system they want – either starting off small and building the system piece-by-piece or going straight for a monster tower.

It will be supplied as standard with a quad-speed CD-ROM drive, HD floppy and a 500Mb-ish hard drive. Because it is an "inbetween an A1200-and-A4000" machine, its pricing is expected to be £700. Full production should start this Summer in preparation for an anticipated big "Christmas". The new Amiga will be at the World Of Amiga show (see page 24).

CanDo offer for floppy users

Save £40!

The power of this month's Coverdisk, CanDO 2.51 means that it requires a hard drive. We know that a lot of you already have drives, but we didn't want to leave you floppy users out in the cold. We've been working hard to secure a special deal for you to get you a hard drive upgrade for the best price possible.



We've finalised a deal at the twelfth hour (which is why this piece is here instead of with our other offers). A1200 owners can obtain a 3.5-inch IDE hard drive with an amazing 1Gb (1,000Mb) capacity for only £190! That's a saving of £40 off the already impressive RRP of £229. The deal has been negotiated with Gasteiner, so the quality is assured and we'll supply each drive with the necessary cabling and a selection of PD software for free.

Because of its incredible value, this offer is only available until Tuesday, 30th April 1996. You can obtain it by completing this form or by phoning our order hotline on ☎ 01225 822511 and quoting order code AS/Gig/03.

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CD32 expansion

We haven't heard much about the CD^{32} recently, but now Eyetech have announced a new internal expansion unit for the machine. The SX32 is intended to turn your CD^{32} from just a games console, into a real computer. The SX32 fits within the CD^{32}'s FMV slot and includes all the standard ports, a VGA monitor connector and provision for an internal hard drive and 8Mb memory expansion.

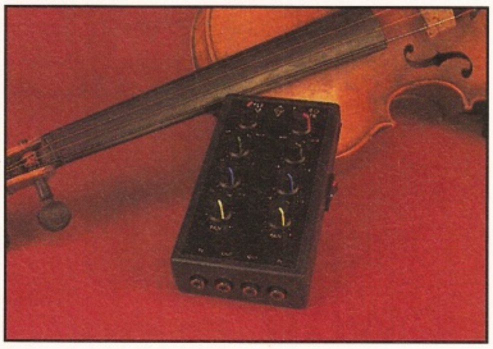
The SX-1 was the first expansion unit developed for the CD^{32}, but its performance was disappointing in that it was much too unstable and bulky to do its job properly. The SX32, on the other hand, is "ideal for a portable, low-cost, multimedia delivery platform," apparently. The SX32 will be reviewed fully in next month's Amiga Shopper. For further information call Eyetech on ☎ 01642 713185.



Sound reduction

Do you want to improve the quality of your sound recording? Well, you can with the Little Gem desktop micro audio mixer that we reviewed back in our October 1995 issue. And now you save £20 when you buy the unit from Gillet Multimedia. They have slashed the price from £69.95 to a mere £49.95.

Give them a call on ☎ 01353 669203.



Fontastic!

The home and professional video enthusiast now have another source of fonts for their video titling. MovieFonts 2 from Diskotech is a collection of 18 original animated titling fonts. The fonts are all in colour and they work with all Amigas with 1Mb and Deluxe Paint 3 (or a similar art/animation program.)

Moviefonts 2 costs £40. If you want to know more call Diskotech on ☎ 01591 620242.





Titbits

Northern lights

Amiga nuts who live near Wigan will be pleased to learn of the birth of another new User Group. The group meets every Sunday at 1pm at St. Thomas The Martyr School Hall, Highgate Road, UpHolland, Wigan, Lancs. They offer free advice, cheap hardware and have an extensive PD library. Entrance fee is £1.50 and you are urged to bring your Amiga with you!

New books

Wiley have just released a new book called the Programmer's Guide To Online Resources. Written by Bob Kochem, the book aims to help you track down the programming resources you need. It covers programmer-oriented bulletin boards, the Internet, CompuServe, America Online, Delphi, BIX, GEnie, eWorld and Microsoft Network.

The Programmer's Guide To Online Resources costs £18.99 and is available by order from major bookstores, or you could call Wiley themselves on ☎ 01243 843294, but they charge £2 for postage and packing.

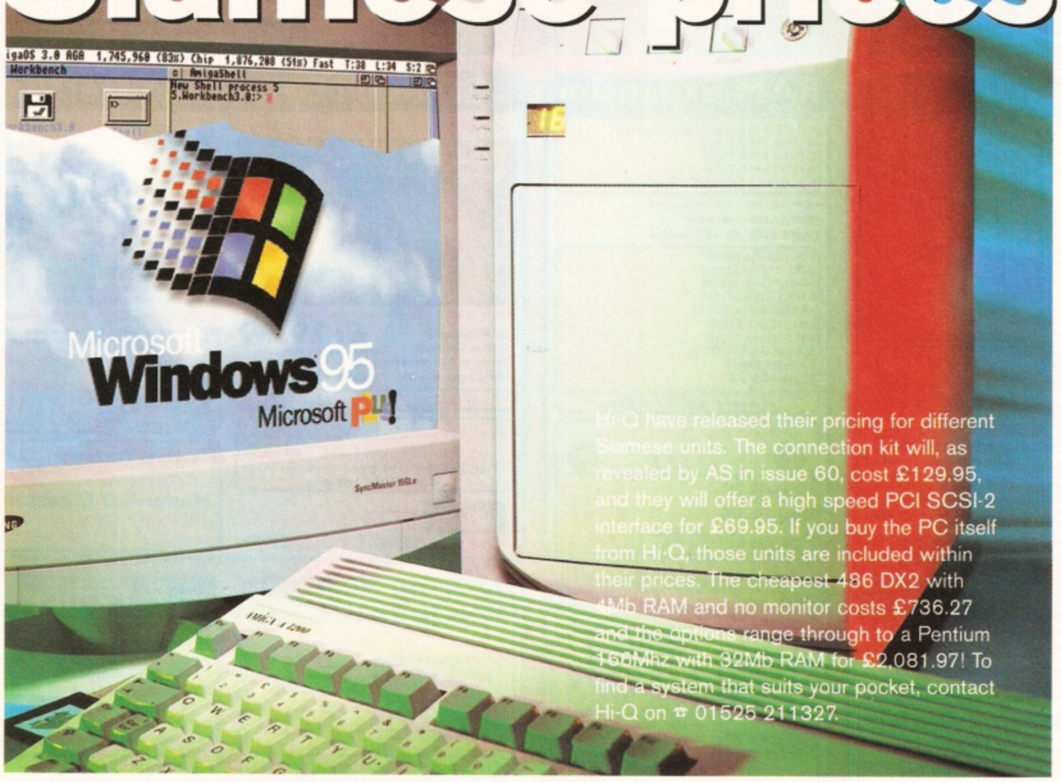
Escom shares

Amongst rumours of financial difficulties, fuelled by their announcement of their DM125 million ($85m) losses for 1995, Escom increased its capital with a release of extra shares. The shares were "taken over by Commerzbank AG for the issue consortium and will be offered to shareholders at the earliest possible date". This increase was an agreement between the company, its associates and bankers so that they acquired new resources amounting to around DM100 million ($70m).

Blitz Basic 2.1

In the April 1996 Amiga Shopper we reviewed Blitz Basic 2.1, we also mentioned the program in our games creation feature in the same issue. Unfortunately, we quoted the price incorrectly in the feature. Blitz Basic 2.1 actually costs £34.99 from Guildhall Leisure on ☎ 01302 890000. We are sorry for any inconvenience caused.

Siamese prices



Hi-Q have released their pricing for different Siamese units. The connection kit will, as revealed by AS in issue 60, cost £129.95, and they will offer a high speed PCI SCSI-2 interface for £69.95. If you buy the PC itself from Hi-Q, those units are included within their prices. The cheapest 486 DX2 with 4Mb RAM and no monitor costs £736.27 and the options range through to a Pentium 166Mhz with 32Mb RAM for £2,081.97! To find a system that suits your pocket, contact Hi-Q on ☎ 01525 211327.

AMIGA POWER

The April issue of the world famous AMIGA POWER is full. Of things. We have an EXCLUSIVE review (that's "EXCLUSIVE" as in "not reviewed anywhere else for ages") of the astoundingly impressive new pinball game from 21st Century, Slamtilt. We laugh heartily at the feeble attempts of Super Street Fighter II Turbo to be any good. We conclude our complete playing guide to Alien Breed 3D. We examine the complete and utter history of pinball – both on and off the Amiga. And we reminisce (in that tedious way people of our age tend to do) about one of our favourite children's shows from the 1970s, Canoe Squad. It's out now. Or soon anyway.

An Editor
AMIGA POWER

AMIGA FORMAT

Our man in Germany this month is young Mr. Sandiford. He isn't usually in Germany, but he is this month, because he has been dispatched with a notebook, camera, press badge and plenty of sharp pencils to bring us back all the details on the exciting CeBit show. Amongst other exhibitors, Amiga Technologies will be there, showing off a brand new Amiga! Graeme will be only too happy to tell you all about it in the next issue of Amiga Format, on sale 11th April.

Nick Veitch
Editor

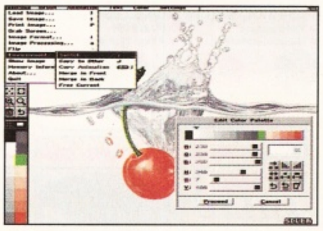
Titbits

Personal development

Cloanto have been continuing development of their popular Personal Paint program. PPaint, they believe, is the ideal program for Internet publishing, because its colour reduction abilities make it perfect for helping save download time for pictures, and its support of new formats like PNG gives users a program from a company with "years of experience where PC and Mac companies are just beginning to introduce products."

They have also released a GIF module for PPaint, which includes support and documentation for Internet features. It is available from Aminet as gfx/conv/gif_io.lha.

Cloanto have also finished a set of high quality datatypes for GIF, JPEG, PNG and XBM formats. They claim they are "fast, system compliant and support unusual format variants." They support 24-bit datatype tag extensions and can pass true colour data to applications such as the CyberGraphX software. These datatypes are included in the Amiga Surfer pack and will enable users to view 99.5 per cent of pictures on the WWW.



Amiga Shopper's mail order buying guide

To make buying by mail order as easy and as safe as possible, Amiga Shopper has put together the following top 10 tips to buying mail order products:

1 Before you send any money for goods, telephone the supplier to make sure that the item you require is in stock.

Ask questions about the mail order company's policy on delivery and returns of faulty equipment. Make sure there are no hidden costs such as postage and packing. Find out when you can realistically expect to receive your goods.

2 Always read the small print on advertisements.

3 Beware of companies that do not include their address on their advertisements. Avoid companies which do not answer or return your telephone calls.

4 Pay by credit card where you can. If you are ordering goods of more than £100 in total value, you are legally entitled to claim compensation from some credit companies if the retailer goes bust. Check your credit card company's policy. You can also try to get extra insurance in advance.

5 Always keep records. If you are buying by credit card, keep a note of the time of the order and ask for an order number. When ordering anything over the telephone, always double-check the price.

6 If you are not paying for the goods by credit card, pay by cheque instead. Never send cash through the post, and avoid using postal orders.

7 If you are sending a cheque, keep a note of the cheque number, the date and the exact value. Make sure you know the exact name of the mail order company too.

8 When you receive your goods, check them carefully. If anything is missing or faulty, contact the supplier immediately.

9 Always order goods from the most recent issue of Amiga Shopper.

10 If a problem arises, contact the supplier in the first instance. Calmly and politely tell them your problem. Most problems turn out to be minor hitches or misunderstandings that can easily be resolved without taking the matter further.

If you think you have a grievance, contact your local Trading Standards Officer. The number is in the phone book.

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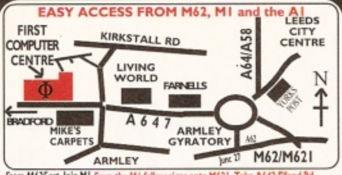
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Hardware

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Amiga Technologies 1241 Q-Drive Quad speed external CD-Rom Drive, for A1200, via PCMCIA. **£239.99** No additional I/face needed

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Epson Stylus Col. II/S/820 Mono	£17.99
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Disk labels x500 £6.99

Disk labels x1000 £9.99

DTP services offered

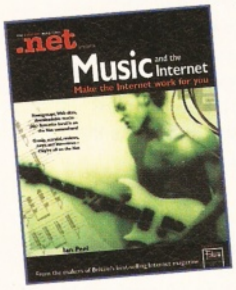
We have had an encouraging response to our plea a few issues ago for people who can offer Amiga printing services to our readers. We have details of two more companies this month:

• Printout offer DTP services including scanning, film and bromide output to a high resolution imagesetter and colour inkjet printing. For details and prices contact them at Printout, Rock House, Wheatsheaf Corner, Shiney Row, County Durham DH4 4QX, or call ☎ 0191 385 6591.

• Enlightenment Systems can handle colour or mono scanning, overlay of artwork or high quality text on to existing images, conversion of image files to Amiga or PC format, high quality colour or mono printing up to A4, lamination, binding and they can even produce customised colour greetings cards for you. Contact Enlightenment on ☎ 01387 254195.

Future vision

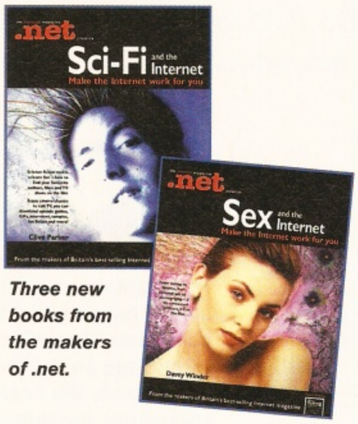
The UK's leading Internet magazine .net (published by Future Publishing, of course), has brought out three new books for Internet users. Called the Future Visions series, these books review every site they can find concerned with their chosen subjects; they also contain advice on navigating the Internet, with all the jargon explained.



The first of the trilogy from .net is Music And The Internet which "highlights the enormous synergy between music lovers and computer technology"! The book takes a tour through every type of music site you could think of which can be found on the Internet.

The much more interestingly-titled Sex And The Internet has been written by Dave Winder who's name you may know because he has contributed to Amiga Shopper on many occasions. It contains material on anything connected to sex and relationships on the Net: from dating to pornography.

The third book, SciFi And The Internet covers – you guessed it! – anything and everything that could be classed as science fiction to be found on the Net.



Three new books from the makers of .net.

The books costs £12.99 each and they are available from all the major bookstores.

Titbits

Quantum Leap

Quantum Leap have obtained the Vidi range of digitisers previously available from Rombo and re-released them. The Vidi 24RT will sell for £149 and the Pro version for £249. Quantum Leap can be contacted on ☎ 01506 461917. AS will be looking at the models in detail next month.

Towers and Shuttles

Blittersoft have released details of a set of new Tower systems and a selection of Shuttle (daughter) boards. The Shuttles are available for A1200, A1500, A3000 and A4000 models. As an example, the A1200 version offers: 7xZorro III (5DMA), 6xPC ISA, 2xVideo, 1xCPU expansion slot, 1xreal time clock and 4xSIMM sockets for memory. Coming with a choice of tower units and 230 watt power supply, that unit will cost £499.95. For details of other specifications, contact Blittersoft on ☎ 0198 261466.

Programming with CanDo

We are giving away CanDo 2.51 on our Coverdisks this month, and we asked ***John Kennedy*** *to help you understand just how much you can achieve with this powerful authoring system...*

"CanDo is very **powerful**, so there is a lot of information to try and absorb."



CanDo is not like any other programming language, because of the way in which it combines a point and click interface with a more traditional script-based approach. For example, you can make CanDo display an IFF image either by typing in the command "ShowPicture" into the script, or by clicking on the Picture Icon. If you click on the icon, the necessary script commands are automatically inserted.

A CanDo program is called a "deck", because it consists of one or more "cards". One card at a time is displayed on the screen, either on a custom screen display or in a Window on an existing screen. Some applications have one card, some have many. The cards may contain "objects" such as items of text, an image, a button or some other element. Each object may also have an associated script: for example, a card may contain a button. When the button is clicked it triggers a script which forces CanDo to move to a different card.

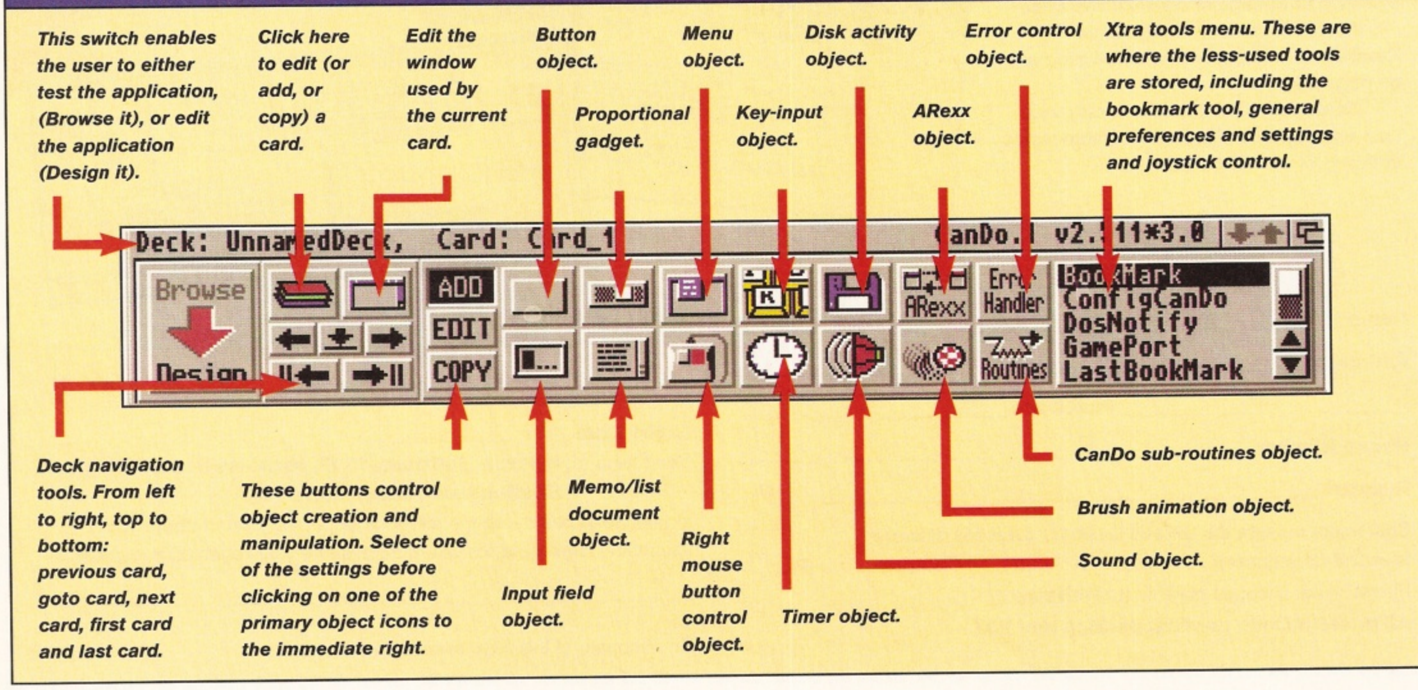
CanDo decks can be saved and loaded to disk. It is also possible to convert a deck into a stand-alone application which you can pass around your friends. However, they will also need to have CanDo installed on their system to be able to run the application.

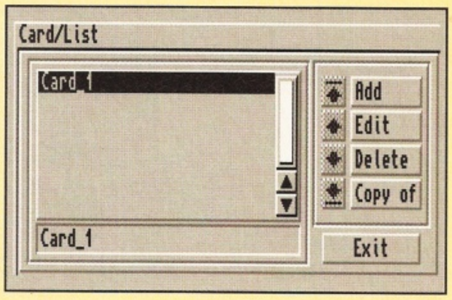
CanDo is very powerful, so there is a lot of information to try and absorb before you can be happy creating and running your own programs. Before we get to a real, working example program, here is a explanation of some of the more useful icons. Remember that there is on-line help available: position the pointer over the control panel and press the HELP button on the keyboard.

Example project

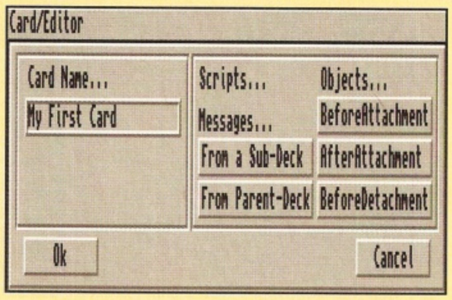
To get started, we are going to create a deck with two cards (see steps 1 to 12 pictured to your right and on page 22). Each card will have a different message on it, and there will be buttons to enable us to move between them. You should try and master this simple project

Guide to CanDo's main toolbar





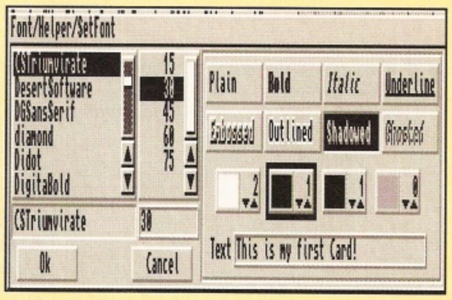
Step 1: ***Starting from scratch, you'll see that you already have a blank window. This is the first (and so far only) card in the deck. Click on the card editing button. You should see a window like this, a list of all the cards currently in the deck. Click on Edit.***



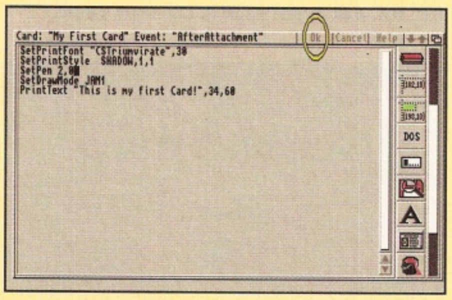
Step 2: ***Now we are in the Card/Editor screen. Click on the name of the card and rename it. The buttons on the right determine which scripts associated with this card we are going to edit. For the moment, click on "AfterAttachment".***



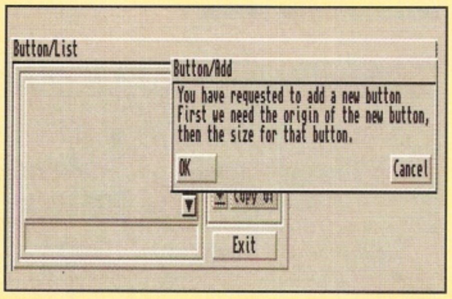
Step 3: ***The Script Editor. This script is started every time the card is displayed. You can type in commands on the left, but let's use the icons. Scroll the list of tools to the right until you find the letter "A". Click it. Now we can add text, so click the "Set Text and Font..." button.***



Step 4: ***You should see the text editing window appear. Here you can select the font you wish to use, the colour and the actual text. As you experiment, you should see the text appear in the screen above. Get something close to this and click on OK.***



Step 5: ***Now click on the Position Text button. You can move the pointer around until you are happy with where the text is located. Click OK and you'll get back to the script editing screen. Now look at what CanDo has automatically coded for you. Click on the OK in the title. Position the pointer over a keyword and press the Help key for information on each command.***



Step 6: ***We are back at the card editing window, so click OK. We are back at the card selector window, so click Exit. We are back at the control panel. Make sure the Add/Edit/Copy button is set to ADD and click on the Button object. Click on ADD and you'll be asked to sketch out the size of the button. We will use a special type of button, so it doesn't matter what size.***

before being tempted to add embellishments, in case you get lost. It is vital to understand the basics before getting carried away and adding interactive animations.

Script Editor

The Script Editor is the most powerful part of CanDo because it is here where you create the underlying programs which determine what your program actually does. A thorough understanding of all the commands is essential, so you should read all the on-line documentation carefully, and also look through the example decks to see how they work.

You can either type commands into the Script Editor, or use the Helper icons down the right-hand side to write the script for you. You can edit the script created by the icons as though you had typed it yourself, so the icons are an easy way to get started.

The icons are shown in the "Helper icons" box on page 23, along with a description of the code they produce. Remember, you can scroll the list up and down. If you want help on a particular command in the script, place the pointer over it and press the Help key. Press the Help key from the main window for general help.

The Script Editor is called upon many times. For example, you can write a script to occur when a button is pressed (as in our example), or when the button is double-clicked, dragged or released. In fact, from the Button editor screen you can write a script for ALL of these events if that is want you want to do.

You can attach script to practically everything that can happen in a CanDo deck, and the most useful "happenings" are represented by the icons which appear on the main bar (displayed in the annotated diagram on page 20). For example, when you click on the Timer icon you can define the script to take place after a predefined delay or at a particular time. Your associated script could shuffle the deck to the next card in a slideshow every 10 seconds.

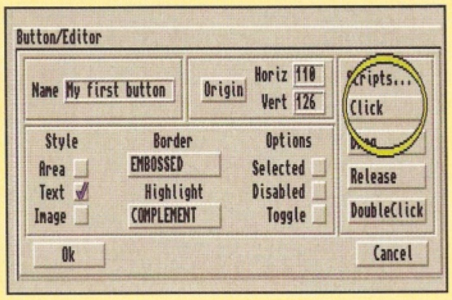
In a similar fashion the KeyInput icon attaches script to individual key presses, and the DiskActivity icon attaches scripts to the insertion



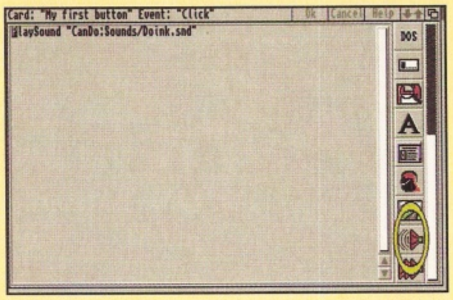
CanDo is perfect for creating helpful multimedia application software. You could create a guide to your local town, for example.



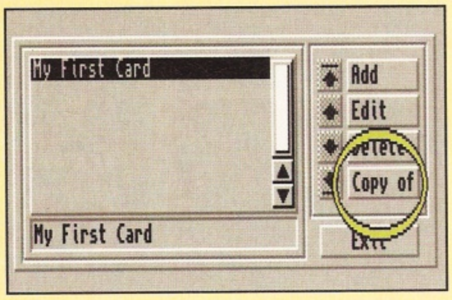
Use CanDo to make a slideshow of your holiday snaps. You could even record the finished show to video tape with a genlock.



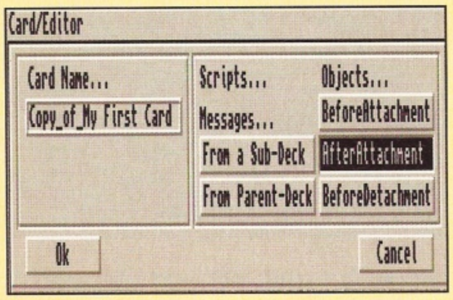
Step 7: *Edit the button. There are three types: Area is a location on the screen, Text is a word or words, and Image is an IFF brush. Select Text and you'll see the Text Editor again. Enter "Click me!" and OK it to get back. You can also choose the colour and outline style of the button. When you've finished, click on the "Click" button in the Scripts part of the window.*



Step 8: *Now we're at the script which is executed when the button is pressed. At present this has little to do (we want to make it move to another card, but we only have one), so let's add a sound effect. Click on the Single Speaker icon, then select one of the supplied sound effects. You'll end up with something like this. Click on OK, OK, Exit to get back to the main panel.*



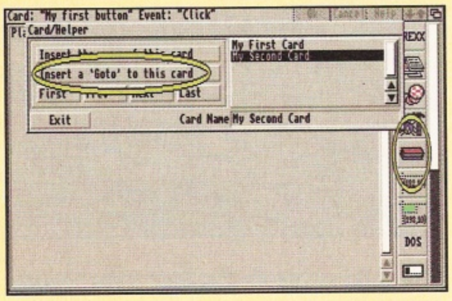
Step 9: *Make sure the Add/Edit/Copy is set to Edit, and click on the Card Selector again. You'll see your card listed. Now click on "Copy of" and your first card will be duplicated. Now we have two cards in the deck, although at the moment both are the same. Set the name of the second to be "My Second Card".*



Step 10: *Now edit the second card to make the text read "My Second Card". Click on the "AfterAttachment" button again, and you'll see the script we created. Try changing the fonts and colours as well to make it as different as possible. You can alter these by either deleting the existing items or by using the Text icon to make new ones.*



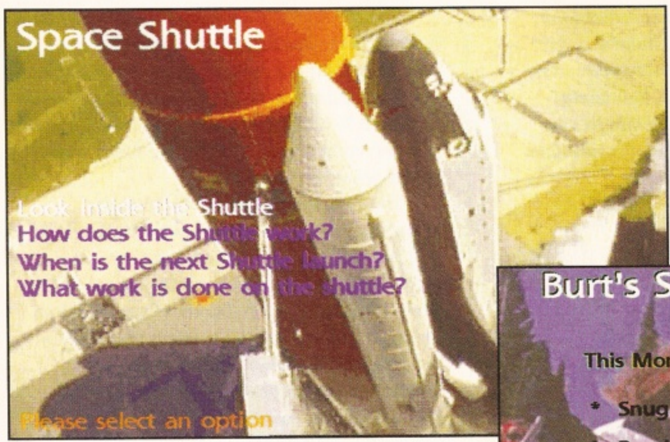
Step 11: *Now we can add a little more action. Go back to the main panel, select Edit and edit the buttons, one at a time. In each, click on the Decks icon in the Click Script and you will be able to add some movement: in other words, when the first button is clicked, the second card is selected and vice versa. Interactive entertainment!*



Step 12: *To try out your new deck, click on the navigation buttons to get back to the first card and then click on the Browse/Design button. Now you can try out your deck!*

or removal of a floppy disk. You can also control what happens when the right mouse is pressed or a slider control is adjusted. Every action can have an associated script, and every script is created in the same way from the Script Editor.

Perhaps the most important scripts are those which are triggered automatically when a card is first used in Browse mode. In our example project, we associate a script to the "AfterAttachment" button. This means that once the card has been displayed on-screen our script goes to work. You should use the "before attachment" script to pre-load animations or other data before the card is displayed and use a "before detachment" script to clear this data from buffers. These, and the sub-deck options, are advanced facilities which you won't necessarily need to get started.



CanDo's easy to use authoring system makes it the ideal tool for creating educational software. It's easy to make interactive applications.



If you run a shop you can use CanDo as a "virtual shop assistant", or as an eye-catching window display system.

Workbench and custom decks

As you can see from the screenshots, it is possible to create decks which run on the Workbench like normal Amiga utilities, as well as using custom screens to display images with hundreds of colours. To define what your cards look like, use the Edit Windows icon on the main menu (see annotation on page 20). This option is very important, because it determines how your card will look.

The options include opening the screen on the Workbench in which case it will inherit your particular Workbench settings such as the resolution or number of colours. Alternatively, you can open it on a Custom Screen. This is the way in which my images of the car, skier and city were created. On the right-hand side of the Window control requestor you will see a choice between "Normal Window" and "Picture Window". Pick the first and you can define the mode, number of colours and resolution of your display. Pick the latter and

you can load an image to make the background display of your card.

The Attributes settings define if the Window has particular features such as a CloseGadget. As you would expect, it is possible to associate scripts with each of these – the default causes the deck to quit when the CloseGadget is selected.

Conclusion

If you have got this far, you are probably still pretty confused, but don't panic! CanDo is such a powerful program that it can be hard to know where to start or what to do next. There are so many icons and buttons it is easy to get lost. Don't expect to master CanDo in one sitting. There is so much to get through, you will need to invest some time. The rewards will be worth it, though – no other programming system gives you so much control over the Amiga in such an easy-to-use manner.

For your first, solo CanDo program, try creating a deck which acts as a slideshow program for your favourite IFF images. All the information you need is here, and our example deck can easily be expanded. Once you get it working, you can start to add embellishments such as keyboard, mouse or automatic operation. Then you can experiment with sound effects, animations, ARexx control, hypertext... With CanDo you can do practically anything!

We will be running a serious of tutorials explaining in more depth how CanDo works and how you can use it to write your own programs, starting next month. ■

Helper icons



1 Arexx: This icon enables you to include ARexx support in programs. You can both send and receive ARexx messages, so your CanDo program can act as both an ARexx-friendly application and as a controller for other ARexx programs.

2 Bookmark icon: Click on this icon and the script is "marked". Double-click on the "LastBookMark" or "Bookmark" text on the right-hand side of the main panel and the Script Editor is operated where the Bookmark was placed. This gives greater speed when one wants to edit particular scripts.

3 BrushAnim Helper: Select a BrushAnim (such as a file created with Deluxe Paint) and control its position and movement.

4 Debug: Check through the script for errors, reporting any bugs or programs.

5 Card Helper: Insert references to other cards, such as simply the name, or more advanced options such as moving to other cards.

6 Co-ordinate Helper: Put up cross hairs on the screen and insert the co-ords at the point when the button is pressed. Useful for accurately lining up objects entered into the script by hand.

7 Rectangle Helper: Insert two sets of co-ordinates as a rectangle is drawn out on the screen by the user.

8 DOS Helper: Enables the user to select an AmigaDOS command or program and inserts the code which enables it to be executed.

9 Field Helper: A field is where the user can input data into the program. This helper creates the necessary script commands.

10 File Help: Select a filename and insert it and its path into the script.

11 Text Helper: Creates the script commands for choosing and positioning text in any colour and any style or font. It's useful because it generates code which you'll often use.

12 Layout Helper: If you want to display a lot of text on screen this helper will make it easier to position it. You can wrap the text around existing objects by altering the default rectangular outline.

13 Paint Helper: A complete paint package for creating shapes and objects on your window. Draw what you need, and when you click OK all the scripting commands appear. Edit them if required.

14 Picture Helper: Select and load an IFF picture file in the Window. This is one way of creating a slideshow program.

15 Sound Effect: Choose a sound effect and play it.

16 Sound Sequence: Choose several sound effects, and play them back in sequence.

CanDo 3.0 upgrade offer

Save £80



Now you have the powerful authoring program CanDo 2.51 from Inovatronics, given away free on our Coverdisks this month, why not upgrade to version 3? We have organised some special, bargain prices which are exclusive to readers of Amiga Shopper.

You can buy CanDo 3.0 from us for only £139; that's a massive saving of £80 off the RRP of the program. Registered users of CanDo 2.51 only pay £77 to upgrade to version 3.

You can also save lots of money when buying CanDo 3.0 plus the debugger program CanDeBug. These programs are available together for only £195, which means that you save a huge £85 when you buy them both from Amiga Shopper.

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THE WORLD OF AMIGA Show guide

The prototype of a brand new Amiga will be on the Amiga Technologies stand at the World Of Amiga 1996; there will be plenty of other new Amiga products at the show too. Be there!

If you are serious about your Amiga, the place you need to be on the weekend of 13th and 14th April is at the World Of Amiga show in London. Amiga Technologies GmbH are sponsoring the event which is designed to "relaunch the machine as a key player on the UK computing scene".

The show will feature a games arcade; high end applications; retailers and a technical advice centre run by the Independent Commodore Products Users Group (ICPUG). And you can meet the Amiga Shopper team on the Future Publishing stand (oh, and the Amiga Format and Amiga Power teams too!).

We have listed all the exhibitors we knew were attending the show at the time of going to press on our floor plan, but there will be plenty of others by the time you read this; apologies to anyone we have missed out!

"All the components are in place for an Amiga event, the like of which we have not seen since the heyday of the machine," boast the show's organisers.

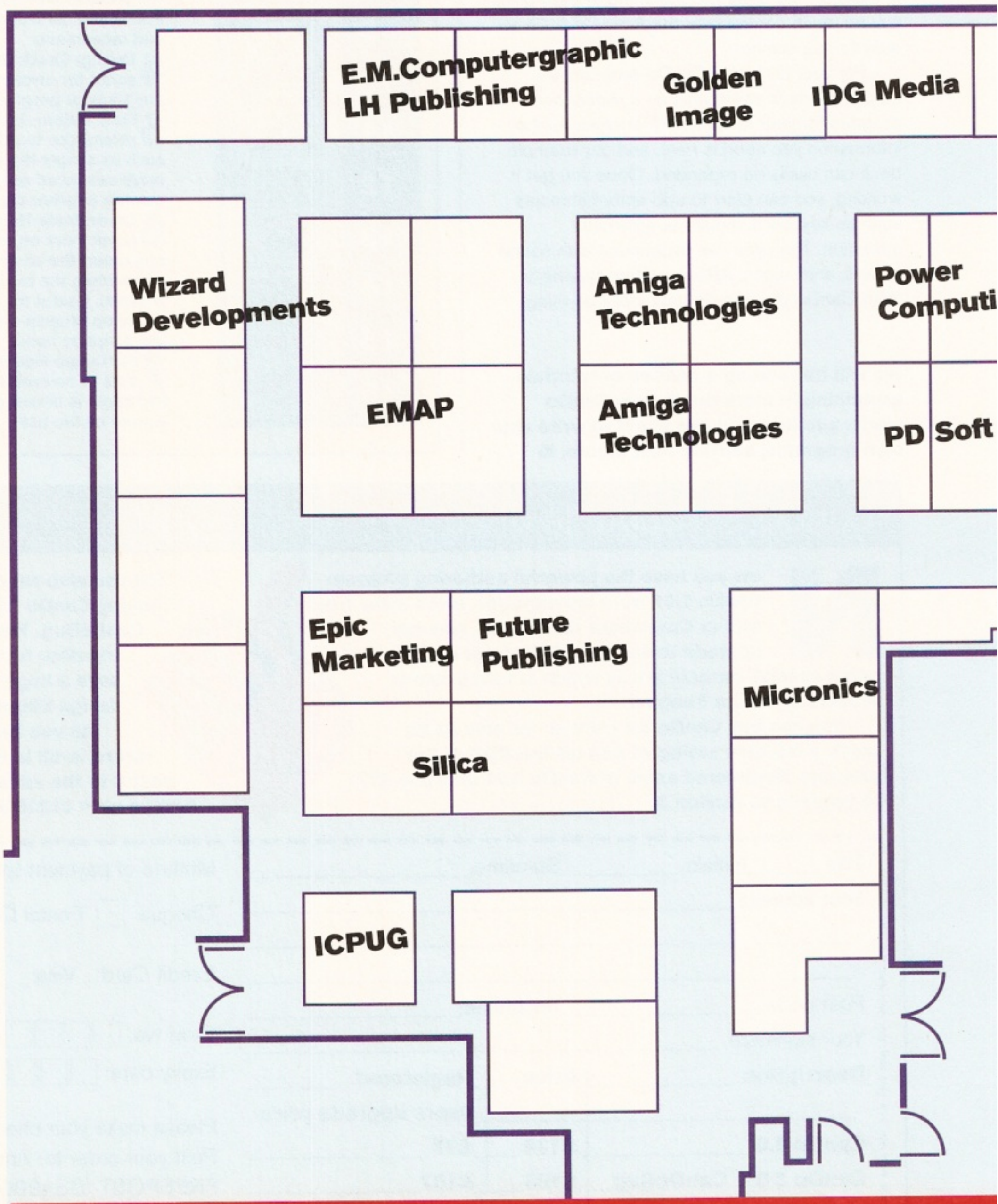
If you turn to page 27 you can enter our special WOA show competition to win an Amiga Surfer pack. Just fill in the voucher and hand it in to the Future Publishing stand.

Where and when?

The World Of Amiga will be held at the Novotel Exhibition Centre in Hammersmith, London; and the dates are Saturday, 13th April and Sunday, 14th April 1996.

How much?

Tickets to the show cost £7 for adults and £5.50 for children. You can book in advance by calling the credit card hotline ☎ 01369 706346.



Turn the page for your

Who will be there?

There will be lots of Amiga companies taking stands at the show – we have reproduced a floor plan of the venue, indicating the companies attending so far. There are too many exhibitors for us to list all their details, but here's a brief run-down of some of the highlights of the show:

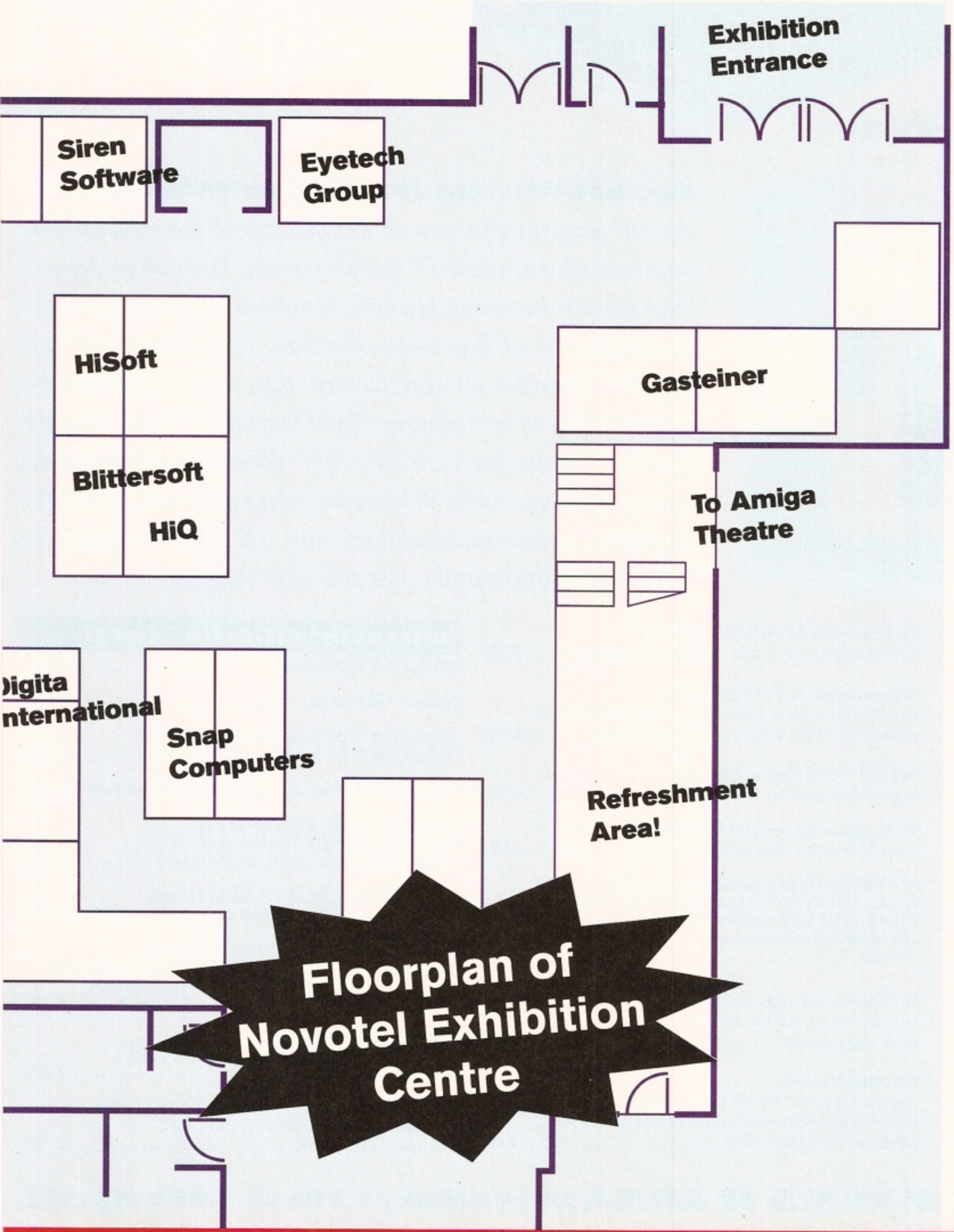
Show highlights

Amiga Technologies GmbH

Amiga Technologies have taken the largest stand at the World Of Amiga, of course.

They will be demonstrating the prototype of their new "Super Amiga". This new machine comes complete with quad-speed CD-ROM; it uses a 680EC30/40MHz, main processor; it features two SIMM sockets on the motherboard which allows a memory of up to 128Mb and it has a flexible expansion bus which can take turbo cards, graphics cards (including MPEG) and multi-serial cards.

"The new Amiga will be shipped with a revised version 3.2 of the Amiga OS.The new features and the many enhancements give the system more power and flexibility," said Gilles Bourdin of AT. We are dying to get our hands on this new Amiga. There will also be the chance to examine the Amiga Surfer pack, for those who haven't seen it yet.



Digita International

Digita will be showing off the power of Wordworth 5 (reviewed on page 36 of this issue). They will also have Wordworth 5SE, which is a special version of the program developed for A1200 users with only one disk drive and 2Mb of memory. We will be taking a look at Wordworth 5SE next month.

Also on show will be Organiser 2, the new version of their personal information manager, which we awarded 91 per cent and a Star buy to when it was reviewed in our January issue.

The there's Datastore 2, the new version of Digita's successful database program.

Epic Marketing

Ever wanted to make movies like Jurassic Park? That blockbuster's success was down to the excellent special FX used. You may not have the budget needed for such a huge venture, but for more modest projects, Epic Software's new Special FX CD-ROM could prove invaluable. This new CD contains advice on how to make movies on the Amiga; it is the first in a series and concentrates on explaining how to produce low-cost special effects. And it will be seen for the first time at the WOA!

The Special FX CD costs £29.99 and will be available from Epic on ☎ 0500 131 486.

Future Publishing

Meet the teams from Future's three market-leading Amiga magazines; Amiga Shopper, Amiga Format and Amiga Power.

We will be running a round table conference with around 20 key players in the Amiga market place. We will also have back issues of all our magazines, plus special subscription offers on the stand. And don't forget to hand in your competition entries!

Gasteiner

Gasteiner will have 15 new peripherals on show. These include a new controller for the A500; a PCMCIA controller for the A1200; three accelerators for the A500/1200/4000 and a range of new mice and trackballs.

HiQ

On the HiQ stand will be the Siamese System for the A1200, which integrates the Amiga and the PC (reviewed in our March 1996 issue). The main programmer of Photogenics, Paul Nolan, will also be on the HiQ stand. Why? Because he is writing the Siamese software for Hi-Q.

The excellent range of JTS hard disk drives will also feature on their stand.

HiSoft Systems

HiSoft have a packed stand, including the first public showing of the Surfin' Squirrel, which is their new SCSI interface. The Squirrel MPEG

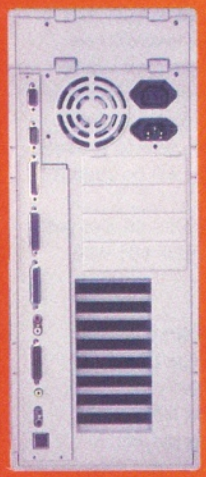
chance to win an Amiga Surfer pack!

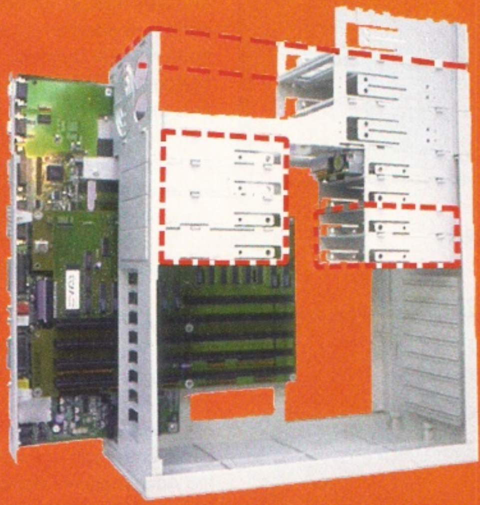
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And now for some technical specifications

the left pictures give you an imagination of the internal construction of the infinitiv™ tower system. The red marks and lines show some extended drive frames in both the front- and the back area of the tower. Further, you can see an Top-Case™, mounted on the towers' top, which explains the expandability of our solution. Each Top-Case™ expands your infinitiv™ tower for an 5,25"/ 3,5" drive bay, ready to use and easy to assemble. Additional drives such as CD-ROMs, harddisks, streamer tapedrives etc. will snap in easiely by using our sophisticated „click and snap" system.

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will also make its debut at the show. This add-on enables you to play MPEG format full motion video CDs.

Termite TCP, CinemaFont, CinemaWorld and CinemaTree will be shown off for the first time on the HiSoft stand too. There will also be their latest range of Squirrel SCSI peripherals: hard drives, CD-ROMs, zip drives and Jaz drives.

ICPUG (Independent Commodore Products Users Group)
Members of ICPUG will be on hand throughout the exhibition offering advice on all things Amiga to anyone who asks for it!

LH Publishing
The publishers of DTP magazine EM (incorporating JAM) will be sharing a stand with E.M.Computergraphic. They intend to have several competitions for showgoers to enter – they will also have some special show offers. They also want to meet their subscribers – and to give advice to anyone who needs it.

Power Computing
Power's stand will feature the first public showing of its 1996 range of products, including the DKB rapid-fire SCSI-2 controller, the Power Tablet, Breathless (their first game), an A2000 040/060 accelerator and an A4000 040/060 accelerator. Power's managing director promised that visitors could also take advantage of the "many bargains" on his stand.

Zeus Developments
Another Amiga development to have its debut at the WOA is a brand new bulletin board software package from Zeus Developments. The program is actually called Zeus and contains many industry-standard communications protocols; there will be a hands-on demonstration of the program available so you can try it for yourself.

Other big guns
All the other big guns in the Amiga world will be at the show too, including Blittersoft, Eyetech, E.M.Computergraphic, Golden Image, IDG Media, Wizard Developments, EMAP, PD Soft, Micronics, Siren Software, Silica and Snap Computers. There will be other Amiga companies there who haven't been mentioned here – only because we go to press too early to get the final list in! See you there.

(If you really can't make it, you won't miss out, because we will have a full report from the World Of Amiga after the show.) ■

Win! A1200 Surfer pack!



If you want the chance to win an Amiga Surfer pack, get yourself down to the World Of Amiga show at the Novotel and hand in your entry coupon to the chaps on the Future Publishing stand.

All entries to this competition must be received by 3.30pm on Sunday, 14th April 1995. The winner will be drawn on Monday 15th April and will be notified by post.

Get connected!

We have one Amiga Surfer pack to give away; it is worth £599.99 and consists of an A1200 fitted with a 260Mb hard drive and 2Mb RAM, and it includes all the Internet software you need, plus a 14.4bps modem. And it's pictured on the left!

Amiga Shopper A1200 Surfer pack competition

Enter your details here and answer the questions. Then cut out this form (or photocopy it) and take it along with you to the World Of Amiga show where you can hand it in to the Future Publishing stand. Please do not send it to the Amiga Shopper offices!

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Are you already a subscriber to Amiga Shopper?
Yes ☐ No ☐

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Jaguar	☐	☐
CD-i	☐	☐
SNES	☐	☐
Mega Drive	☐	☐
Ultra 64	☐	☐

Are you already connected to the Internet?
Yes ☐ No ☐

☐ Tick here if you don't wish to receive details of other special offers from Future Publishing and other companies.

THE WORLD OF AMIGA

Ultimate DIY Part 2

In the second part of our DIY feature, ***Dave Taylor*** *looks at even more ways to expand and enhance your Amiga. "How to..." aims to show you all the things you need to know to get the most from your machine.*





Use a hard drive

Dave Taylor *is your guide on our tour of hard drives and how to do anything with them.*



Last month, we showed you how to physically fit a hard drive. Following on from that, here is a guide to maintaining your new drive. Most drives, so long as they are bought from an Amiga dealer, will come ready prepared for use with your Amiga. However, if yours hasn't, or if you ever want to make a change to your drive, you'll need to set it up using hard drive software.

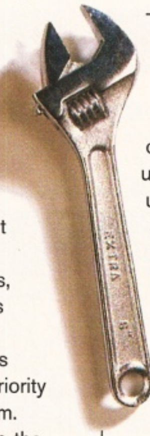
To do this, you need to use the HDToolBox program that can be found on the HDInstall disk for Workbench 2.1+ users. Other users will need to obtain a similar program from a PD library. The best alternative is a program called RDPrep 3.91 and, if you have access to Aminet, can be found in disk/misc as a file called rdp391.lha. We will assume that you will be using the standard Commodore HDToolBox, although the basics are the same for both programs even if the interfaces are different.

Load the HDInstall disk and open the HDTools drawer to locate HDToolbox and load it. (If you are working on changing a hard drive, you should find the program on your drive in the Tools drawer on your boot partition.) Once it has loaded, click on the drive you want to operate on (if you only have one hard drive fitted then it will be the only one to show). Remember that it will only show the number of physical drives attached, not individual partitions.

Now click on Partition Drive and you will move to the screen where you can adjust the properties of the drive. At the top, the entire drive is represented with a bar, split into different sections. These are the partitions. It is easier to cope with a hard drive, especially a large one, if it is split sensibly into sections. Each of these will show as a separate disk icon on Workbench. A sensible split would be a boot partition to contain all the Workbench programs, fonts and libraries, etc; one for application programs and, if you play them, one for games. You might also want a separate one for you own data. This is a good idea if you produce a lot of material, such as multimedia, or if you want to have a machine that can be used by other people but with your data locked away safe from prying eyes or deletion. If you don't produce that much, then a separate folder, or drawer, on your serious partition should suffice.

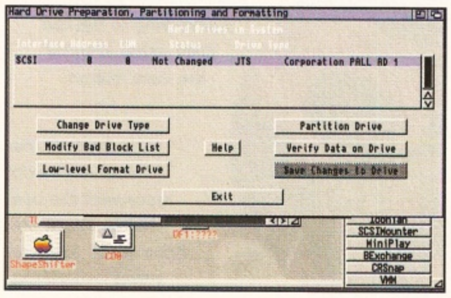
To set up the partitions, click on an area to activate them and then size them. If you are re-sizing an existing disk, you will find that you need to make space by reducing an existing partition before you can enlarge another or create a new one. It might be easiest to delete all existing partitions and start from scratch. Clicking on New Partition will add one that can be then sized using the slider. You can change the name of the partition by clicking in the text box and deleting the default name.

When you create your boot partition (the one that will contain the Workbench files and StartUp-Sequence – in other words be the equivalent of booting your floppy Workbench disk), remember that you will need quite a lot of space because when you start to install software to your new drive, you will find that some files have to be installed to that partition in order for the software to run. 10Mb will quickly be filled up, but size the partition according to the capacity of your drive.

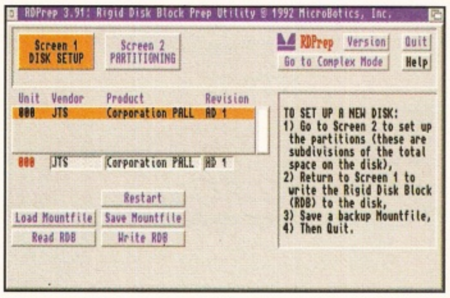


The boot partition must have the bootable option enabled or your hard drive won't load automatically. You might want to make more complex changes to the drive, such as the file system used. If your drive is formatted to the old WB1.3 OFS, you won't get the most out of your drive if you are using a WB2 or above machine. To change these options, you must click on the Advanced Options button and the window will show a new selection. For most people, the only ones that should be of interest are the boot priority and the Change button for the file system.

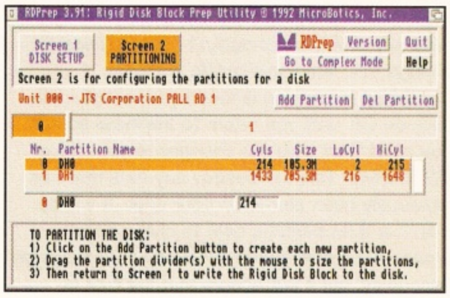
The boot priority is only applicable to the bootable partition and should be set to zero.



HDToolbox recognises the drives attached and lets you pick the one to work on.



RDPrep is the alternative disk prepping software that can be obtained from Aminet.

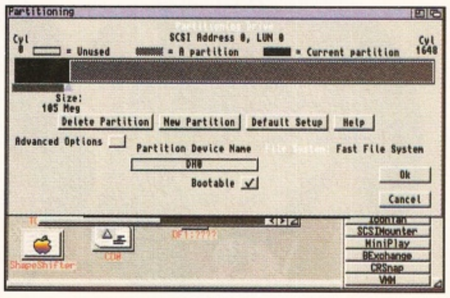


RDPrep works in a similar way to the official HDToolbox from Commodore.

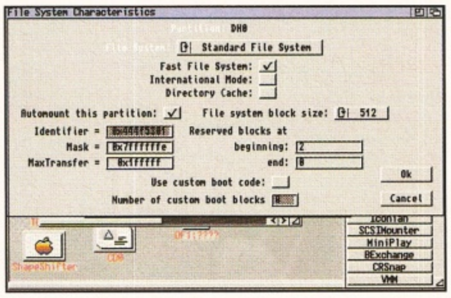
> **"When you create your boot partition, you will need quite a lot of space."**

This means that the Amiga will first attempt to load a floppy disk before booting the hard drive – if you change this, you will find it hard to boot a floppy disk and it will not speed up the booting of your hard drive.

When you click on the Change button, you will move to the screen that controls the file system used. For Workbench 2 users the most likely system you will want to use is the standard one set to Fast File System (WB3 users may want directory caching, which removes a tiny amount of capacity from the drive, but speeds up usage). This is also where you can adjust the MaxTransfer rate of the drive. This option is a hex number that sets the maximum number of bytes that can be transferred in one transfer. It might seem strange that you would want to limit this, but there are occasions when having this set too



Selecting a drive and moving to the partition screen enables you to make any changes.



Advanced options enable you to adjust the filesystem used, even to use a custom one.

high causes problems with software. If you don't have any problems or haven't been advised to change this, leave this option alone!

When everything is set to your satisfaction, click on OK until you return to the initial screen. You must then save the changes to your drive. WARNING! This will destroy any data that has previously been stored on your drive. It will be lost. It is then perhaps best to click on the Low-level Format button. This may not always be necessary, but it will ensure that the disk is ready for use with the Amiga.

You must then boot your Amiga with a Workbench disk and format the individual partitions. A quick format may suffice, but a full format will also make sure that there are no errors on the disk before you start. When the partitions are formatted, you have a set of large, blank disks. The bootable partition must have the Workbench files and programs from the other standard disks. This can be done from the HDInstall disk, or you could do it manually.



Your disk drive is now set up to your own specifications.

...maintain your drive

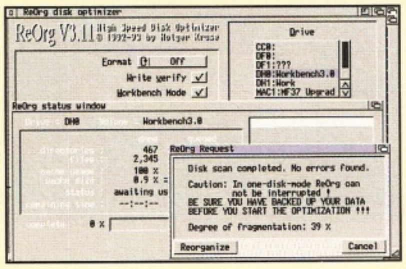
Once your drive is set up, you need several programs to keep everything working. The first one is DiskSalv, which is a must. This program can recover files that you delete by accident and repair a lot of errors that can appear on disks. A version of the program is available from PD libraries, although the new version is commercial.

The second is ReOrg. Whenever you use a disk, the data is fitted on to the drive any way it can, which means that it might be split into sections. This doesn't make much difference to you and you may never notice it, but with large hard drives, it will mean that opening a file might send the drive head all over the place, which will be slightly slower than if it could read the data in a continuous stream. This fragmentation becomes more frequent as you write and delete files from the drive. ReOrg will optimise your drive and fit these segmented files back together. Be aware that this operation carries a certain risk of loss of data, although I've never had a problem.

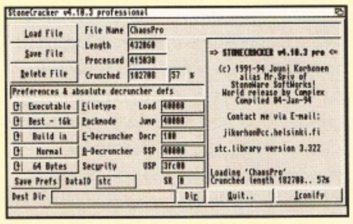
Last, but most important, you need a backup program. This will help you back up partitions that store data you can't afford to lose. Normally, this will mean storing files on floppy disks, although other methods are available (see storage feature in AS55). These programs not only copy files, they also calculate the best fit and include options to archive the data so it takes up the least amount of space possible. There are plenty of backup utilities available, many of which are PD/Shareware; such as MRbackup; included on AS54's Coverdisks.

There are programs that can expand the capacity of your drive. They invisibly pack and unpack data as it is read and written to the drive. One of the better programs of this type is Arctic, (on AS55's disks). You can save space by keeping your programs stored on a partition in a packed format like PowerPacker (StoneCracker is even better). These methods will mean that using your hard drive is a little slower.

As for protecting your drive or partition for privacy, there are some password programs, but these are normally easily circumvented. The most secure is Enigma II, (on AS61's disks). It renders a partition non-DOS until a password is entered (never put it on to a boot partition). The program contains some risk, but is reliable.

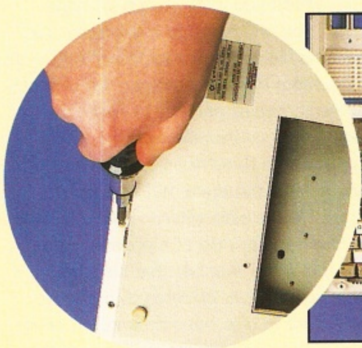


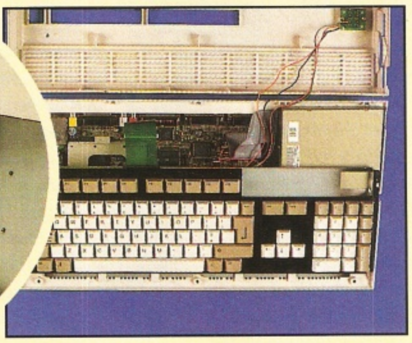
Hard drives tend to get very fragmented because of writing and deleting so many files. ReOrg will rectify this.



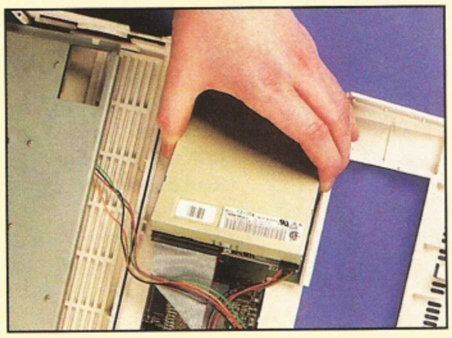
Using file packers enables you to get more on to your hard disk.

...replace a floppy drive

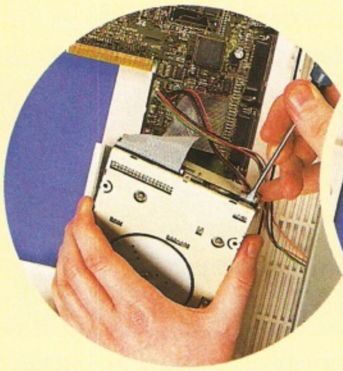


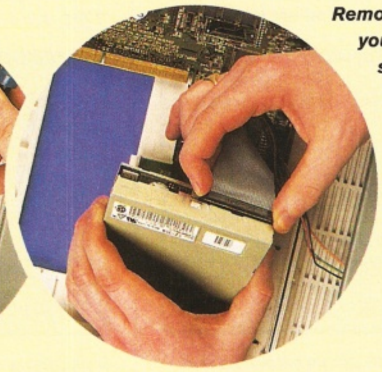


Unscrew the Amiga's casing, including the screws that hold the drive in place. Open up the Amiga.

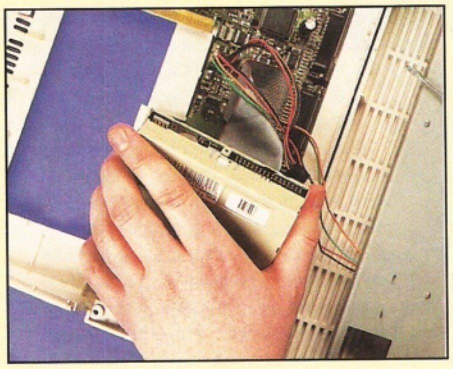


Lift the drive up and out. It should be easy, if not check you have removed the right screws.





Remove the power lead; you will need to use something to flip the little catch. Unplug the data ribbon.

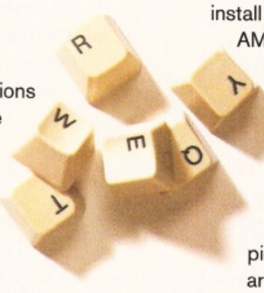


Bring in the new drive and reconnect the two leads. Place the drive in the bay and screw everything back in.



Connect to the WWW

So you have decided to fork out for a modem, but how do you get to those fabulous-looking Web pages?



This is one of the most frequently-asked questions at Amiga Shopper. The problems mainly arise from the fact that in order to get connected, you need to install three packages correctly. In fact, getting up and running is easier than it sounds.

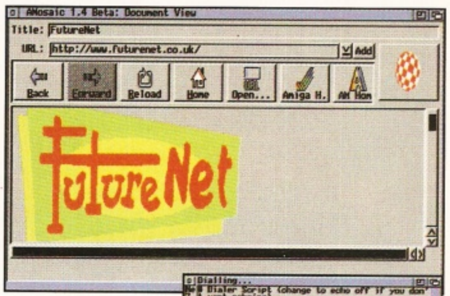
First, you need to get a suitable Internet account (we're going to assume Demon, because it's the most common). Before starting to install the software, you need three bits of information about your account. You need to know your account name, its password and your IP address. You should obviously know the first two already, but the third can be obtained by logging on using a normal Comms package, like NComm; or it is available from Demon, who should notify you of it.

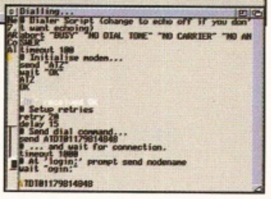
The first program that you need to install is Magic User Interface (MUI), without which the other programs won't run. The installation for this is all done automatically through the Commodore Installer.

The next program needed is the heart of the World Wide Web (WWW) browsing, AmiTCP. This package takes a little time to install, although it's not actually difficult as long as you follow the on-screen instructions. For a step-by-step guide through the installation see the box below.

When AmiTCP is installed, you need to install the actual browser, which is called AMosaic. Again, this is simple to install using the Commodore Installer.

Before using the browser, you should also check that your Amiga has several other things set correctly. You will definitely need a JPEG datatype (and possibly some others), because a lot of pictures that appear on WWW pages are JPEGs and so the datatype is used to view them. The datatype can be obtained from PD Houses or Aminet (it may be labelled as JFIF). You should also make sure that your Workbench is displaying as many colours as possible so that you can see the pictures properly. This is done through the screenmode preferences.

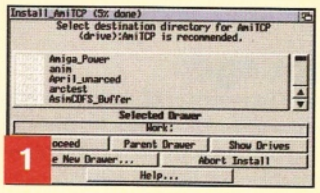




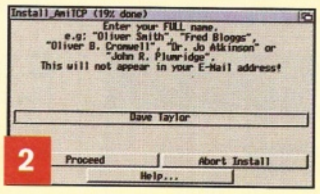
Starting the script opens the dialler window. Now you can link up to FutureNet.

With all the software installed, it's best to reboot. Then turn on your modem and double click on the AMosaic program. A window will open, but will have nothing in it. Open a Shell and type "Link up". The Amiga will jump into action and send off all sorts of commands. When it has connected to the Web, which it will do automatically, you can enter your first destination by clicking on the Open button. Obviously, your first stop will be the Amiga Shopper Home page at: www.futurenet.co.uk/computing/amigashopper.html!

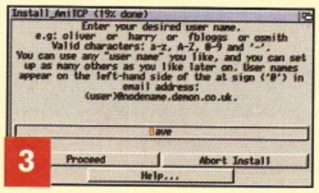
...install AmiTCP



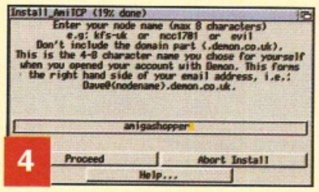
This is a standard Commodore Installer script. Start by choosing a destination.



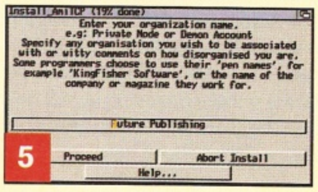
Enter your proper name. This does not have to be anything to do with your E-mail address.



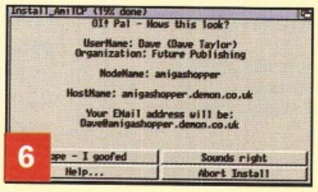
Your user will be added to your actual E-mail address, e.g. Dave at amigashopper@demon.co.uk.



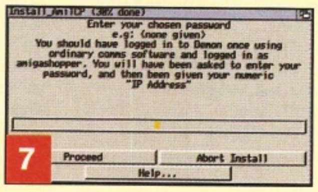
The node name is the name of the E-mail account. It is the "real" part of your E-mail address.



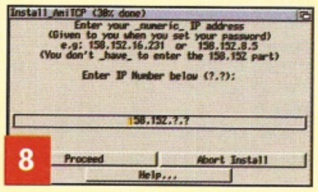
Another additional bit of information for your "signature". You can add anything you want.



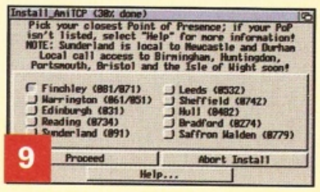
You are given the opportunity to check all the details and go back if you've made a mistake.



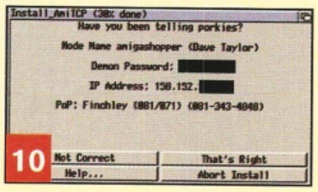
You should already know your password! It is the one you use to log on for normal E-mail.



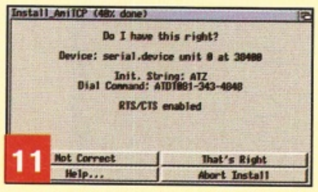
The IP address should have been given to you. All you need to do is enter the last two digits.



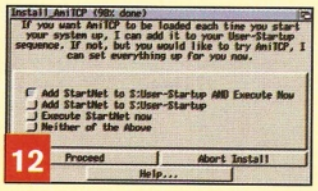
If your local number isn't shown, pick one and then manually edit the dialler script after installation.



Again you are given the chance to review your entries and correct any errors that you've made.



There are then questions about your actual modem. You should be able to just "OK" all of them.



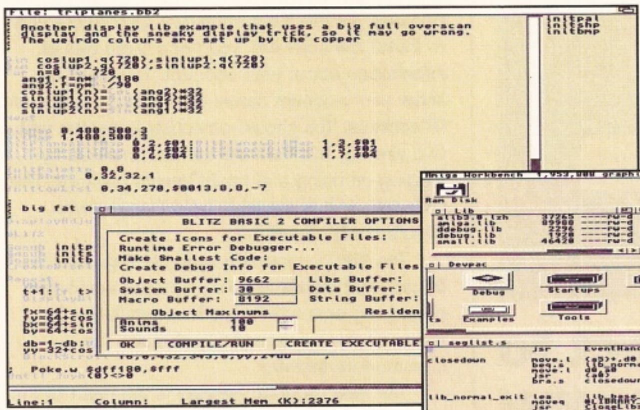
The software is then installed and the option to add the necessary commands to StartUp is offered.



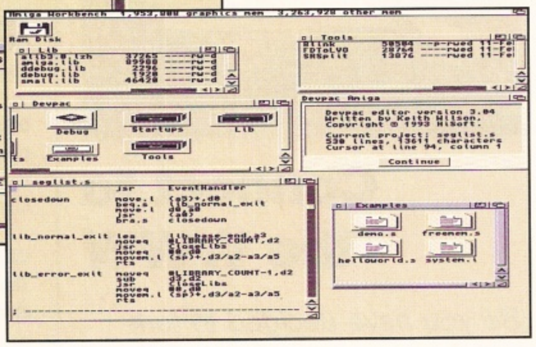
Choose a programming language

Paul Overaa *guides you through the computer programming languages available for the Amiga.*

All languages have good and bad points, but in practice you need only ask three questions: can you learn it? Does it suit your purpose? Will it still be around when you've finished learning about it? It's also important to choose a language that you will be 'technically comfortable' with. If, for example, you are new to programming and want to find some way of making a start, then BASIC is a very good choice, Assembly language is not. On the other hand, if you are a competent coder who has moved to the Amiga from another machine then you might well be interested in trying some of the other programming languages listed here.



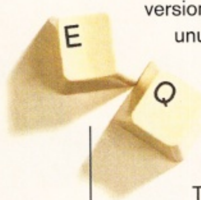
At its current price, Blitz BASIC is good value for money.



Devpac 3 is the undisputed champion with the majority of 680x0 coders.

BASIC

BASIC was originally designed specifically for teaching programming, but over the years the language has become much more powerful, yet it has remained easy to learn. A few years ago a powerful games-oriented BASIC-style language marketed by Europress Software and called AMOS became very popular, but support for the language stopped when Europress moved into the PC software arena. These days, you can't buy AMOS, although versions of the language have been released on magazine Coverdisks from time to time and an AMOS compiler add-on is still available from F1 Licenceware. (AS reviewed AMOS Pro Compiler 2 last month.)



Another BASIC, which has an enthusiastic band of followers is Blitz BASIC, and a new version has only just been released. Blitz is unusual in that it provides a number of language extensions including NewTypes (C-style structures) and list handling. It's powerful, now good value for money, and a fair choice if you are into games coding.

The third choice for potential BASIC coders, HiSoft BASIC 2, has not been specifically aimed at games programmers. It is simply a good, well supported, compiled BASIC whose core facilities are broadly compatible with Microsoft-style BASICs found on many other computers. Ideal if portability considerations are important!

Language contacts

AMOS Compiler
Price: £14.95 (plus 50p P&P)
Supplier: F1 Licenceware

Blitz BASIC 2.1
Price: £34.99
Supplier: Guildhall Leisure

HiSoft BASIC 2
Price: £99.95
Supplier: HiSoft

Devpac 3
Price: £99.95
Supplier: HiSoft

Dice C
Price: £98.95 (plus 6.50 P&P)
Supplier: Fourth Level Developments

HeliOS Forth
Price: £65
Supplier: Helios Software

GT Prolog
Price: £89.95
Supplier: Grange Technology

Macro 68
Price: £130
Supplier: Helios Software

HighSpeed Pascal
Price: £99.95
Supplier: HiSoft

Contact numbers

F1 Licenceware
Contact: ☎ 01392 493580

Fourth Level Developments
Contact: ☎ 0117 985 4455.

Grange Technology
Contact ☎ 01235 851818

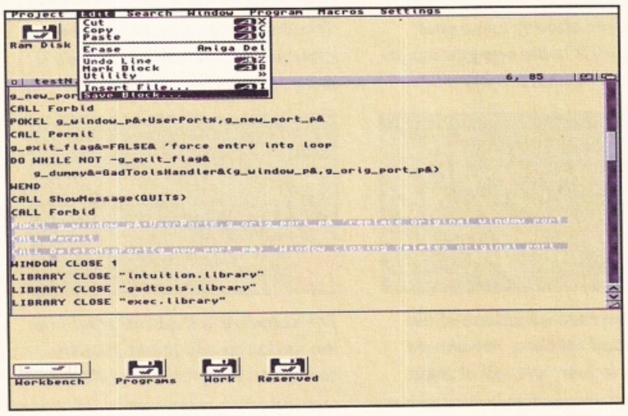
Guildhall Leisure
Contact: ☎ 01302 890000

HiSoft
Contact: ☎ 01525 718181

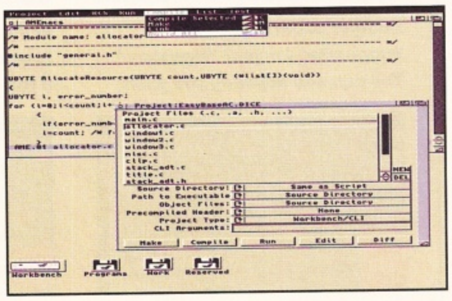
Helios Software
Contact: ☎ 01623 554828

C language

C is the most important of all Amiga languages, but learning to use a C compiler for the Amiga is quite a big commitment. The main problem is not understanding the C language but learning about the way you interface with and use the Amiga's library routines. At one time the C package that all others were judged by came from the SAS Institute. Development of SAS C, however, has stopped and the C package now getting some well deserved attention is Dice C by the Obvious Implementations Corp. C++ (C plus plus) is a more powerful, object-oriented version of C. The SAS C package included a C++ translator, Dice C does not.



HiSoft BASIC 2 is a solid, well supported Microsoft-style BASIC.



The Dice C compiler is very powerful and going from strength to strength.

Assembly language

Assembly language is popular amongst the more dedicated Amiga programmers but it is difficult to learn. Without a shadow of a doubt, the most popular Assembly language environment amongst Amiga owners in the UK is HiSoft's Devpac 3. It's a good, well supported product which has stood the test of time. Another commercial offering, Macro 68, though providing many facilities which advanced coders would find useful, has never been able to mount any real challenge to topple Devpac from its throne.

The others

Although BASIC, C and Assembler are the main languages used for Amiga programming there are many others available. HiSoft offer a Pascal compiler called HighSpeed Pascal that could prove useful if, for example, you are studying programming at college and Pascal is being used as the main language. A good implementation of Forth, called HeliOS, is available from Helios Software; and for those of you interested in artificial intelligence applications, there is a version of Prolog available from Grange Technology.

There are also quite a lot of PD and Shareware offerings around, including the PD C and North C compiler packages. There's even a Gnu C++ available for the more ambitious among you. Charlie Gibbs deserves a mention here because he produced what is now a firmly established, and respected, freely distributable Amiga Assembler package, called A68k. A68k forms the basis of a lot of PD Assembler packages. On top of this there are some new languages, including one called E which is gaining ground, plus a variety of fringe languages such as Secal.



Jargon buster

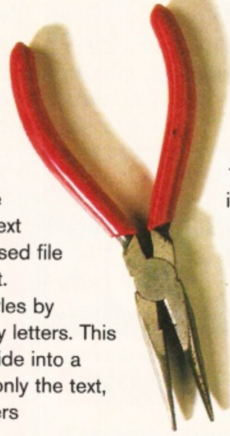
Core facilities:
The main parts of the language without the Amiga-specific extensions.
Portable program:
A program is portable if its source code can be transferred from one type of computer to another and made to run with little or no change. The more work needed to get the program running on a new machine, the less portable the code is considered to be.



Write an AmigaGuide

You want documents that enable the user to work their way through levels? AmigaGuide is the answer.

This is another area that we get frequent requests for help with. The beauty of these documents is that while they offer some neat tricks for experienced users, they are still easy to get started with for the beginner. Let's go through the basics behind writing an AmigaGuide document.



These documents are nothing more than normal ASCII files; the normal output standard to word processors across platforms. These files don't contain any of the flash text effects that are signalled in specialised file formats like a Wordworth document. However, they do store different styles by means of a set of codes denoted by letters. This means that if you load an AmigaGuide into a normal text editor, you will see not only the text, but also a set of additional characters surrounding certain parts.

What happens is that a special program, either Multiview on earlier machines or AmigaGuide in more recent ones, will be used to view the document. Making use of the AmigaGuide.library (in Libs:), this interprets the codes and instead of showing the codes it shows the text in the specified format.

All that you need to do is create a document in an editor and save it, then add an icon and ensure that its default tool is either AmigaGuide or Multiview. (To change the default tool, click once on the icon on Workbench and then select Information from the Icon menu.) The following is a guide to some of the codes:

Guide to guides

This is a short listing for an AmigaGuide, followed by explanations of the codes. For your reference, line numbers have been placed next to the lines, but when typing a guide you do not include line numbers.

```
1) @database My Guide
2) @wordwrap
3) @node Main "The Main Page"
4) @{fg shine}The first line of the text as a title@{fg text}
5) Some normal text
6) @{b}Text in bold@{ub}
7) @{i}Text in italics@{ui}
8) @{u}Text underlined@{uu}
9) @{"My first link" link link1} This is a button linked to another node
10) @{"My picture" link Mydisk:picture/main} This is a button linked to a picture
11) @{"My sound" link Mydisk:sound/main} This is a button linked to a sample
12)@endnode
13)
14) @node link1 "The new link"
5) Whatever you want to say
12)@endnode
```

1) The first line of the document needs to inform the computer what type of document it is. "@database" informs it that it is an AmigaGuide. "My Guide" is simply the title of the document; you can call it whatever you want.

2) "@wordwrap" turns the automatic sizing on. This means that lines can be written as one long string without any returns and the guide will fit the words on to the line and adjust the lines if the window is resized, so that you don't have to scroll across to read the full line.

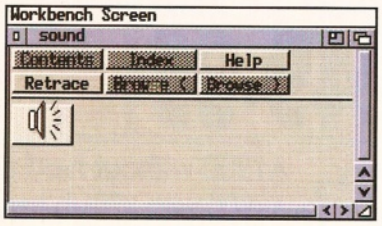
3) The first page of the guide has to be flagged. Each page is called a node, so the first page is flagged by "@node Main". The text in quotation marks is what will appear in the titlebar of the document for that page.

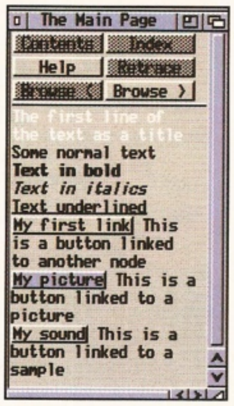
4) You might want the first line of your document to stand out as a title. "@{fg shine}" makes the



AmigaGuides can link to pictures and use datatypes to show any supported file format.

(Image by Alex Thornhill.)





***Above:** AmigaGuides can also link to sound files, if you have the right datatypes.*
***Right:** Using the wordwrap option means that guides will reformat the text as the window is re-sized.*

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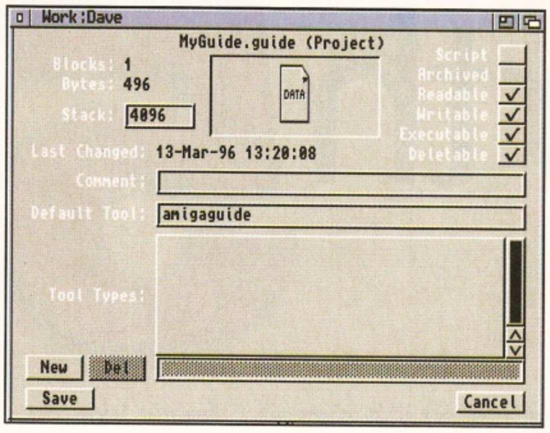
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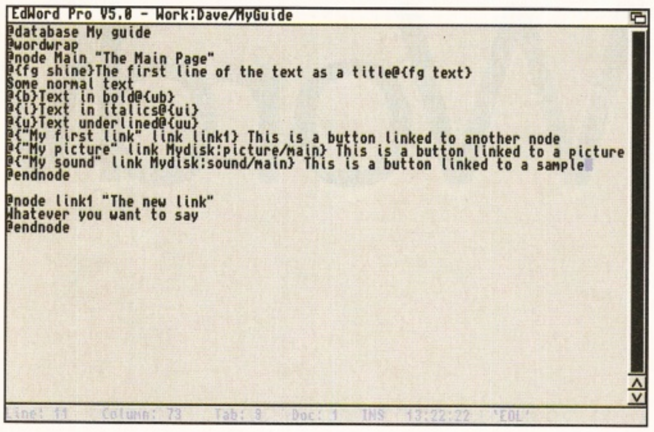
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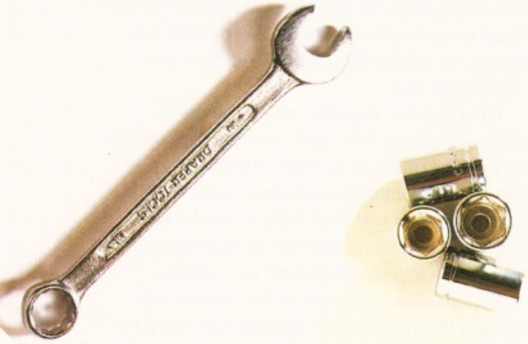


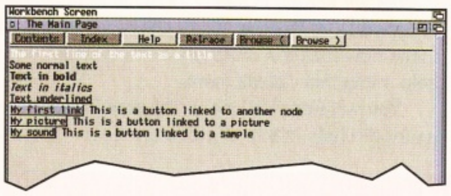
Selecting the icon from Workbench enables you to enter the tool that will read your guides.



The guides are simply ASCII text files written in an editor with the codes included in the text itself.

"You can link to any datatype supported, so not just pictures."





And here is the guide file when viewed with either Multiview or AmigaGuide.

text a different colour – white by default. Any text after this will appear shine, so the text needs turning back by using the "@{fg text}".

5) Just typing in text will appear as normal text as in any document. This is just how the majority of the document needs to be entered.

6) Text can be made into a bold typeface using the "@{b}" command, and as in (4) needs turning off again, which is done with the "@{ub}" command.

7) The same as (6) except that text is italicized.

8) The same as (7) except that text is underlined. Combinations of the commands can be used. You could have "@{b}@{i}@{fg shine}Flash Text!@{ub}@{ui}@{fg text}", which would put the words "Flash Text!" into bold, italic, shine and then reset the font.

9) This is where AmigaGuide comes into its own. This is how to include a button that you can click on to move to a different part of the document. The text in quotation marks is what will appear within the button. The word "link" tells the guide what the button will be linked to; i.e. where to go in the document if the button is pressed. The word "link1" is the name I have given to the node (page) that it should go to; you can call them anything, e.g. "Chapter1". After the button and commands, signalled by the closing "}" you can put some text that will explain to your readers what the button links to. This way you can also simply incorporate buttons into text. You could type "Amiga Shopper is the only choice for serious @{"Amiga" link amiga} owners" and have the link to the node "Amiga" where there would be more information about the computer.

10) AmigaGuides can deal with more than just text. This type of link displays a picture called "picture" from a disk called "Mydisk". The "/main" is needed for it to open up what is essentially a separate document to display the picture.

11) You can link to any datatype supported, so not just pictures, which you could have in IFF, JPEG, TIFF, etc format as long as you have the datatypes. You can also link to sounds, such as this 8SVX sample. When the node is selected, the sound will be played.

12) In order for nodes, or pages, to make sense, the program needs to know where a node ends. So, every single node must be finished with "@endnode".

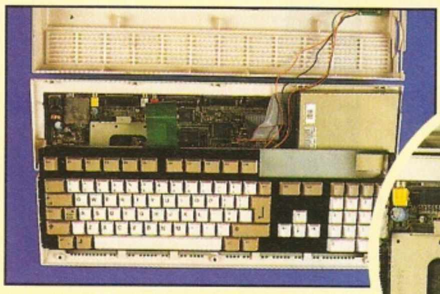
13) A spare line between nodes will help you to look through the guide later.

14) Any new nodes have to be noted. This is the node referred to in (9). As with the main node (3), the text in quotations appears in the titlebar.

Extra help

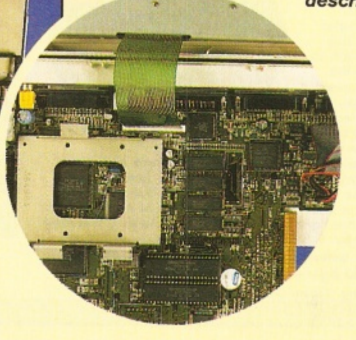
There are several utilities available in the PD that will help to make sure that nodes link up – such as Badlinks. You can also convert guides into normal documents, using utilities like Heddley (on AS55's Coverdisks), so that you can strip away codes and having written a guide, also have a normal ASCII document. ■

...replace a keyboard

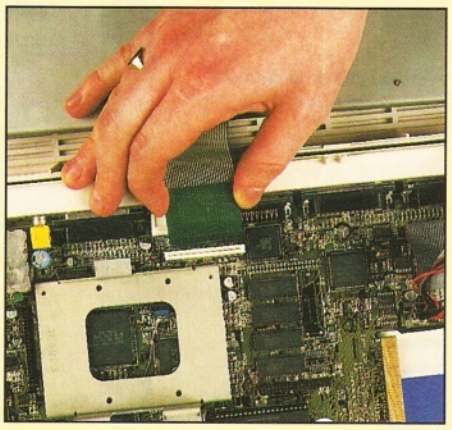


Open up the casing and lift back the keyboard. You may need to remove the power lead to the power light.

All you need to remove is the plastic-coated ribbon. This is also the procedure for repairing the ribbon, as described last month.



The ribbon should just come free. Hold down the white plastic casing when freeing it. Reverse this process for the new keyboard.



Wordworth 5

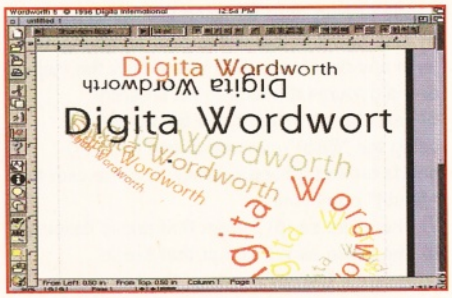


Two powerful word processing programs are fighting for supremacy. Can Wordworth 5 finally triumph over Final Writer? **Graeme Sandiford** *is the adjudicator...*

As far as Amiga word processors go there are only two main camps; the one with users who relish the power of Final Writer, and those who appreciate the interface and niceties of Wordworth. These two mighty applications have battled for word processor market-supremacy over the last few years. Up until now the struggle has been pretty even, but Digita are making a decisive move towards Final Writer's end of the market by substantially beefing-up version 5 of Wordworth.

Despite the new, powerful features, one feature remains unchanged in Wordworth 5 – its interface. Wordworth's HIP (Human Interface Protocol) interface and its unique Digisense system are two of the biggest reasons for the program's popularity. In recent years, Digita have been working with Swansea University to develop and refine the interfaces of their programs to ensure that they are intuitive to use and provide a productive environment. This continued hard work has paid off in a big way.

A pleasant surprise in the package is three extra disks containing 50 CompuGraphic fonts.



Wordworth's Text Effects are a match for Final Writer macros like Final Wrapper.

> "Digita are making a **decisive** move towards Final Writer's end of the market."

These are supplied free with Wordworth 5 and are welcome because choosing the right typeface can influence how readable or attention-grabbing your text is when printed out. If you are confused by the term CompuGraphic, the best way to relate to these fonts is that they look the same no matter what size they are because they're not based on bitmap images. When they print out they are also printed at your printer's maximum resolution. Wordworth has support for Adobe Postscript, TrueType and Amiga fonts too.

Installing the program and the fonts is painless because they both use Installer, so you can have as much or as little interaction as you want. A full installation including items such as clipart, takes up just over 3Mb of hard disk space. If you have a fetish for swapping disks you can still install Wordworth to floppies.

You may be hard pushed to noticed any changes to Wordworth 5 immediately because the default screen is nearly identical to Wordworth 3. To save you hours trying to find all these new features there is a section under the help menu that details them.

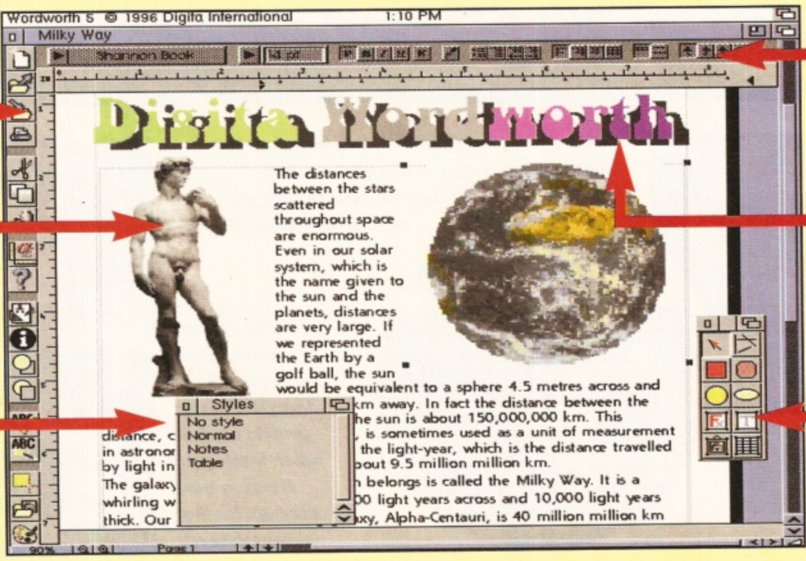
You will also find one of the new features under the help menu. Wizards are best

Word processing in style

Here's the Toolbar – it enables you to access commands with your mouse. You can customise it too.

Pictures can be inserted in a variety of different file formats.

Drag-and-drop style sheets make light work of formatting paragraphs.



The Ribbon bar provides you with access to text formatting features, including the Bullet point command.

This garish headline was created surprisingly quickly with the new Text Effects tool.

Using this window you can add a variety of objects including text boxes, images and tables.

described as interactive tutorials and are great for getting inexperienced users to use the program effectively and quickly. On running a Wizard (such as the invoice Wizard), you are taken step-by-step through the process you have chosen to be demonstrated. The Wizard asks you to make entries when needed and at the end you will have learnt a new aspect of the program and have something to show for it. Unfortunately, there are only four Wizards included at the moment; however, you should expect to see more appear in the Public Domain because they are basically ARexx scripts and therefore quite easy to make.

ARexx support

Yep, that's right, Wordworth now has support for ARexx. Hurrah! Excuse me for that outburst, but this is a major addition and it could lead to the development of even more new tools. Despite being overlooked by a surprising number of software developers, an ARexx port is a big asset to pretty much any type of program, because it enables it to be controlled externally and it can also control external programs.

However, as demonstrated by several keen Final Writer users, ARexx can be used within a program to create new features. These tools take the form of macros; all you need to make your own is a good understanding of the Amiga, Wordworth and the ARexx programming language. Although well-hidden, the Help Guide file contains most of the program's ARexx Command set and is still being worked on.

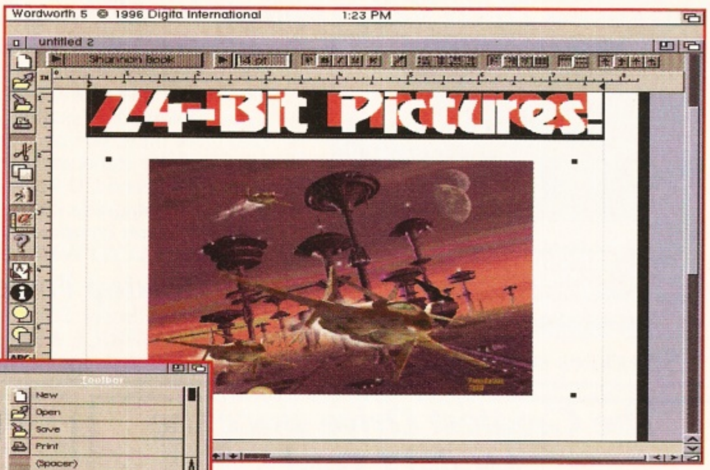
It's a drag!

Another welcome addition are the drag-and-drop style sheets which Final Writer doesn't have. Style sheets are extremely handy because they can change the format of text quickly and easily. A style sheet contains formatting or styling information such as text and background colours, kerning, tracking, underlining, the typeface and the size of text. In practice this means creating a style sheet that has the desired attributes in the style sheet editor, then applying it to the target paragraph by dragging and dropping it from the style sheet window.

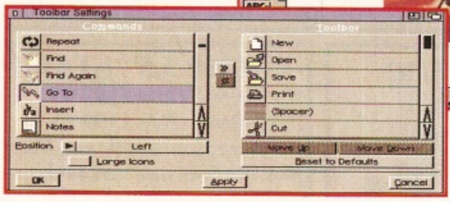
Wordworth's implementation of this feature is impressive and is comparable to the system found in QuarkXpress (used to lay out AS and many other magazines). When creating a new style sheet you can base it upon an existing one and even determine which style is applied to a new paragraph (each time you press <return>). As with Xpress you can import style sheets from other documents, but you can also apply them to selected areas of a paragraph and enjoy the benefits of a preview of your style sheet as you create it, which you can't do in Xpress.

There are several other formatting tools in Wordworth 5, including a Fast Format option. This enables you to copy a paragraph format and then paste it over and over on to other paragraphs. This is useful because you can simply select a paragraph that is formatted the way you want and then make any other paragraph share that formatting without having to create a style sheet, or find out exactly how it is formatted.

***Right:** This is a 256-colour preview of a document containing a 24-bit image.*



***Below:** It is easy to create your own custom toolbars with this editor.*

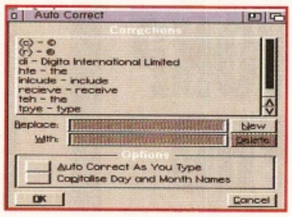


It is also possible to create paragraphs with hanging indents by simply clicking on a button. Similarly, you can add bullet points to a paragraph by clicking on the Bullet Point button. Doing so brings up a requester that enables you to specify the font and character of your choice. Your paragraph is then indented to the first Tab stop and your chosen character is inserted.

Font Effects have been added which can be used to modify fonts. The available functions include stretch, oblique, small caps, strike-through, double-underline and superscript. The program's tabling features have been improved as well and it is now possible to load TurboCalc spreadsheets as a table within your documents.

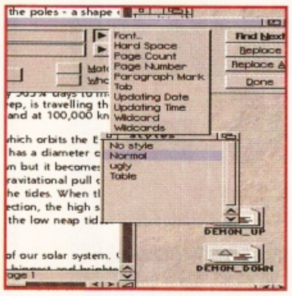
If you have a high-quality printer then you will appreciate the enhancements that have been made in Wordworth's image handling and printing capabilities. It is now possible to import 24-bit images and have them displayed at the best quality of your display. It also improves the quality of the images that are printed out.

Auto Correct is not a spell checker; it expand abbreviations for you.



> **"Wordworth 5 is the ideal choice for the beginner."**

Here's the new and improved Find and Replace tool in action.



There is also intelligent printer font support for laserjet printers, so that the program automatically use the available fonts without having to switch to a separate mode. Background printing is possible too, so you can continue working on a document as it is being printed out. As with previous versions, Wordworth's printer support is excellent and the installation script has an enormous list of available printer drivers that can be installed with pretty much every printer I've heard of.

One of the features of Wordworth that has always drawn me to it is its excellent support for different file formats. It can now open text in the following formats; Final Copy II, Final Writer, ASCII, RTF (particularly useful), Word Perfect 5.1 for DOS, MS Word for DOS, MS Works (text files only), Wordstar and MS Write for Windows. It can also save files as ASCII, RTF and Word Perfect 5.1 for DOS. Several graphics formats are also supported and you can load pictures saved in EPS, IFF, TIFF, GIF, PCX, BMP and IMG formats.

Feature perfect

Wordworth 5 is quicker and smoother in operation than its predecessors, most notably when saving and loading files. All of the great features of previous versions are still there too.

While Wordworth doesn't have the extensive DTP features of Final Writer, it can be used to create attractive documents relatively easily with its own collection of tools. With the addition of an ARexx port the program has every chance of gaining as many power features as FW4.

Thanks to its excellent interface and helpful on-line and printed manuals, Wordworth 5 is the ideal choice for the beginner who is looking for a good balance of power and ease-of-use; it is definitely worth upgrading to for experienced users of earlier versions too. ■

Wordworth 5

Price: £69.99
(upgrade Wordworth 3.1 £29.99)
(upgrade any other program £39.99)

Supplier: Digita International

Contact: 01395 270273

Verdict: 94% Star buy

Epson



Weighing in at 5kg is the lightweight champion of the laser market. At just over £400 and capable of 600dpi, the EPL-5500 is a little beauty.

Now you can buy a laser printer for the price of an inkjet. **Larry Hickmott** *tests the new EPL-5500 from Epson.*

Peripherals like the Epson EPL-5500 make me feel old. That's because I can remember the days when you needed a warehouse to store your computer and a huge desk the size of an office door for anything that resembled a printer. The story is so different nowadays and you have to look no further than the EPL-5500 for proof.

Here is a 600dpi printer that costs just over £420 in the High Street. It's not that long ago that a 300dpi model would have cost a lot more than that, so the EPL-5500 is a bargain. It's also very small. Most of my printers tend to absorb all the desk space given to them, but the Epson has plenty of desk visible around it.

When in use, the desk space required for the EPL-5500 increases because the in-tray for the paper folds out in front of the printer to take up to 150 sheets of paper. Out-going paper spits out of the top and on to an angular tray that doesn't appear to be very strong.

Getting the EPL-5500 up and running with the Amiga was simple. Making such a statement after having used so many printers may appear to be assuming too much but with TurboPrint 4.1 and Studio 2 already installed on my Amiga, it was plug and play using the printer. Using TurboPrint 4.1 and Studio 2 also introduced me to some differences between the two programs.

First, they are two packages you will need to consider if you intend using this printer with your Amiga. This is because the printer has no control panel and all its internal functions like the number of copies and so on are controlled from Workbench. Both Studio 2 and TurboPrint do it differently though.

Whereas Studio 2 comes with a separate desktop control panel called SetupPJL to set the various functions in the printer, these same controls in TurboPrint are controlled from various panels and some controls do not exist at all. Of the two, I prefer Studio 2's approach which has them all in the one place.

Quality toner

One item that caught my eye was the separate toner cartridge and drum assembly. In this day and age of all-in-one toner cartridge assemblies, this two-piece job is refreshing because, while the printer is producing good quality output, you don't need to replace the drum. It has a life expectancy of 20,000 sheets, while the toner cartridge is supposedly good for 3,000 sheets. Expect around 20 per cent less for real use.

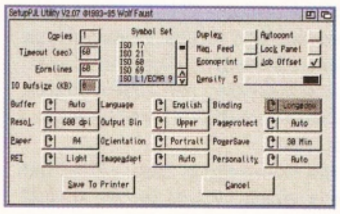
Bear in mind that the toner cartridge is likely to cost upwards of £50. When you consider that a toner cartridge for my LaserJet 4MP costs the same but also has an imaging drum in it, you have to wonder why the Epson toner cartridge costs so much without the drum. It is after all the drum which contains all the valuable metals and that's now separate from the toner in the Epson model.

To be fair to Epson, if you compare the costs of the Epson in a run of 20,000 copies, to the HP LaserJet 5L (the EPL-5500's closest competitor), the EPL-5500 comes out ahead of the 5L by around £90.

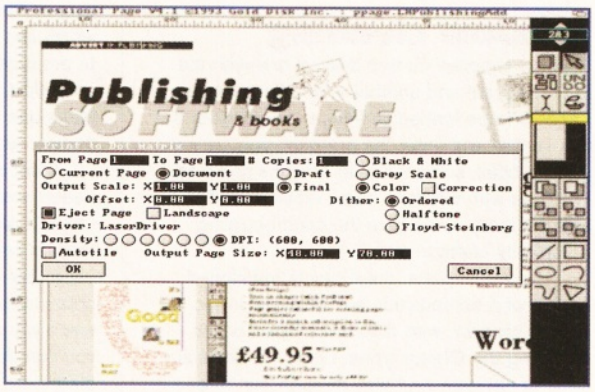
The EPL-5500 is also ahead of the 5L when it comes to expansion because it will take an EpsonScript module so you can print PostScript. Consider that my first print test with this printer, a landscape A4 page, took well over an hour to print, but when printed using PostScript (on a different printer), it took only two and half minutes, it's not hard to see why PostScript is so valuable for the Amiga owner.

The printer comes with 1Mb of memory as standard, although other memory versions are available and the PostScript model requires 5Mb of memory. Going back to the EPL-5500's paper handling, as well as the 150-sheet paper feed already mentioned, you will also find a slot for the manual feed above the in-tray, where card of up to 157gsm can be fed.

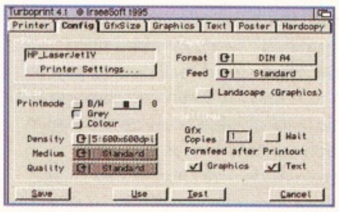
Overall, the EPL-5500 is cracking printer. I had it running until I had drained it of all its toner and at no time did I have any problems like a loss in quality, overheating or paper jamming. At the price and with its PostScript option, I would look at it more closely than the Hewlett-Packard 5L which is a great printer but doesn't take PostScript. Don't forget that you will also need to spend £49.95 on either TurboPrint 4.1 or Studio 2 to get the most from the EPL-5500. ■



Above: ***Controlling the functions of the printer has to be done through software like Studio's "Setup PJL" utility.***



Above: ***With a suitable DTP program and the Epson EPL-5500, you have the beginnings of your very own DTP business.***



Left: ***The latest printing enhancement package in the UK, TurboPrint 4.1 has support for lasers that emulate the HP LaserJet 4; the Epson is one such printer.***

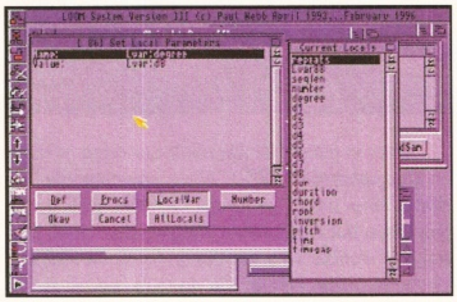
Epson EPL-5500

Price: RRP £399
Supplier: Epson UK
Contact: 0800 220546

Verdict: 91% — Star buy

Loom version3

As new forms of music appear and evolve, so too does music software. **Maff Evans** *finds out whether it's all for the better.*



Objects are controlled by variables, which can be global or local. Here we see a window containing the current local variables available.

"Problems that hound Loom to embarrassing levels."

Algorithmic composition is by no means a new phenomenon. Classical composers such as Bach dabbled in translating mathematical formulae to acceptable musical forms and many electronic artists have come up with similar ideas. This is no surprise, since computers can both carry out complex mathematical functions AND link to music equipment. Loom attempts to bring the two worlds together, by presenting you with a series of maths-based functions which can create random or ordered pieces of music. This is done by stringing together 'Objects' in a tree-like arrangement, each of which has its own function and attributes.

At its simplest level, an Object can consist of a string of notes to be played as a pattern until the next Object is triggered, but all manner of colossally complex manipulators can also be created as Objects, themselves transforming other parts of a tree to create transpositions, arpeggiations, recursions and... well, almost anything, really. Sound complicated? Believe me, you have no idea.

Window cleaning

Loom is supplied on two disks – one with the main program and another with different types of Objects to be loaded in. When you get past the title screen and enter the program, you are just given a blank screen, a strip of icons and a few windows with which to begin editing. That's about it really. From here the mind-boggling complexity starts to show.

The actual parts (the Objects mentioned earlier) of a composition are arranged in the Object window, with different shaped boxes depicting the Object types. Other windows are used to navigate your way through the 'tree', including a visualiser window to show data within an Object, an instruments window displaying sounds and another window for playing and looking at Objects.

Rather than having a menu strip at the top of the screen, each window has its own set of pop-up menus, all pertaining to the functions of the active window.

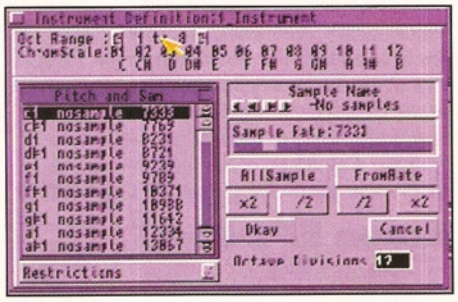
The most simple composition you could create would just be a string of mono phrases or chord Objects strung together alongside a drum beat, but to use Loom as it was intended, you'll need to grasp the theory of algorithms in composition. The best way to describe this is in terms of a series of events like a computer program. You set up Objects with parameters that can be triggered by variables (Loom can handle variables that are local to a particular process or global to an entire composition). You then set up a series of conditions that the Objects must adhere to and mathematical progressions that affect the conditions that the Objects detect. Lost you? Well, think of everything being a series of IF...THEN and WHILE...WEND loops, with the progressions and Objects sitting inside.



Chain reactions

The next step up is to use recursions. This enables Objects to use other Objects or even themselves to define how an Object will act. In basic terms this is either how a musical phrase will play or how another Object will be affected by a series of calculations, all in a nested series which can produce wild results. Getting things to produce listenable music takes a lot of time and effort, since everything can exist in a chain. Make one change and EVERYTHING can be thrown out of whack.

Most of the work done in Loom will be with transformations, which involves placing special Objects alongside musical phrases to affect them in certain ways. The actual transformations used vary wildly, from simple transpositions of notes to maths functions and randomisers. Even when you use the random Objects, there's a lot you can do with the functions on offer. For a start there are various types of distribution you can use (linear, exponential, bell curved and so on), which in turn can be controlled through the various effects – all of which can be tracked in the visualisation window (which gives a graphical representation of what you're doing. When you've got a handle on all this, things can



In the instruments window, you can load IFF samples, tune them and map them to a particular scale. There's no support for MIDI instruments.

be linked up into huge networks, producing long, evolving pieces of what is often called process music. Well it is for the first few bashes you take. Later, you may create something which is more akin to the usual forms of music. All very complicated stuff, I trust you'll agree. In fact I had to refer to my Mathematics degree-holding girlfriend and her text books (which, incidentally, featured texts on the algorithmic compositions of Bach) to put some of the theories into practice. Some of those books only just covered the maths involved, and the chaos theory sections of Loom I'm told are too complex for degree courses – it's a complex brand of mathematics in its own right.

When you consider the amount of processing that has had to go into Loom to create these processes, the programmer must be a maths wizard to have been able to translate these theories into musical tools.

Yes... but

Loom is a brave attempt at coming up with a new way to compose music. Unfortunately it fails on a whole slew of levels. The first is that the system is very unstable. Attempting to run in a number of ways (from floppy, from hard disk, with or without extra RAM, accelerated and non-accelerated and even on different Amigas) quite often presented glitches and complete lock-outs (either a freeze or just quitting the program). If you've spent time trying to manipulate Objects this is much more than frustrating.

The second problem is in the operating system. File-location, moving Objects, operating windows and structuring the system is far from straightforward. Windows refuse to close, confusion between file types gets annoying and navigating even a simple algorithm is fraught with difficulty. Expecting any musician to cope with an unwieldy interface places a stumbling block in the creative process. Not good at all.

The third, and probably most heinous, setback is the environment itself. Even basing music around algorithms, recursions, formulae, random distributions, transposition maps and patterns needs to build up from a basis. Simply placing controls on a blank canvas and expecting you to plough through the manuals and learn the maths is a bit much. If you're going to program music using such a system, you might as well do it in C or something.

There are a number of other problems, such as limiting the way you create instruments to a specific map with a certain type of sample, no support for MIDI (MAJOR mistake), poor filing support, a ragged, undisciplined structure – not open, just ragged, and instructions which take impenetrability to new levels.

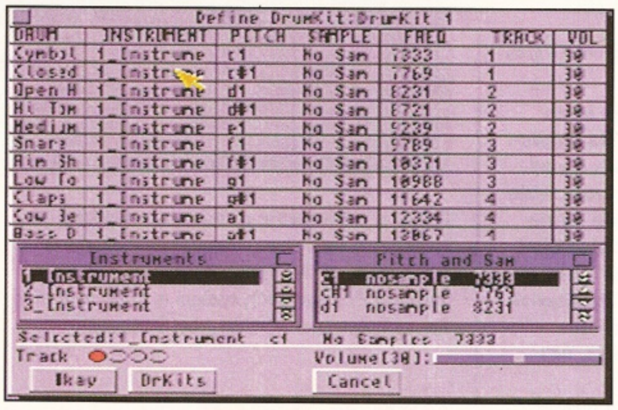
This isn't just an argument against algorithmic composition or process music, since there are programs on other platforms that allow you to use formulae, arpeggiations, recursions and random distributions to create music algorithms – and they work properly. Admittedly they're more expensive, but you get a solid piece of code that won't fall over, a good user interface, sample and MIDI-based tools and the ability to create music that people will want to hear. That's worth paying more for. Loom isn't worth buying at all.

Glitchy software, a confusing environment, limited output possibilities and too many assumptions on the knowledge of musicians are all problems that hound Loom to embarrassing levels. All the good intentions, brave inclusions and complex tools in the world can't overcome all this.

What could be a better alternative would be to contact Seasoft for a copy of the acclaimed (and rightly so) OctaMED Pro and spend some money on maths books and a reference guide to the work of modern East European composers. Other musicians have managed with this kind of material, so why shouldn't you?

The processors

Algorithmic composition usually results in a very characteristic form of music, usually called 'process' music. Many composers have produced such pieces, the most famous of these being such artists as Michael Nyman (who has produced scores for Peter Greenaway's film work) and Steve Reich (who recently performed the acclaimed 'The Cage' and 'Six Pianos'). A name which will probably trigger more peoples' memories is Richard James, also known as Aphex Twin. His 'Selected Ambient Works Volume Two' CD featured many process-type tunes, some of which are extremely challenging to usual music forms. Perhaps the most well-known artist in the field is the prolific Philip Glass, creator of Einstein on the Beach and Koyanisquatzi. His work has been very influential in the field, and he even worked with Richard James to produce a cross between the techno of Aphex Twin and classical recursive themes. Get hold of issue 36 of Shopper's sister magazine, Future Music, and listen to the cover-mount CD to hear Icct Hedral – the results of their collaboration.

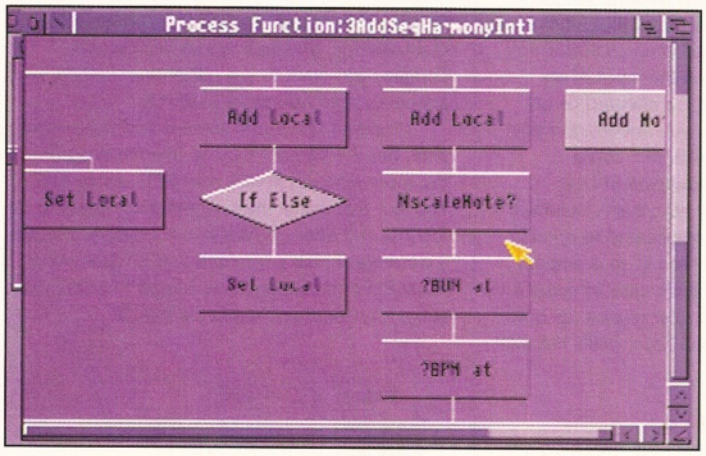


Drum patterns are predefined and distinctly non-algorithmic. This page allows you to provide a set of samples of your choosing for the various percussion sounds.

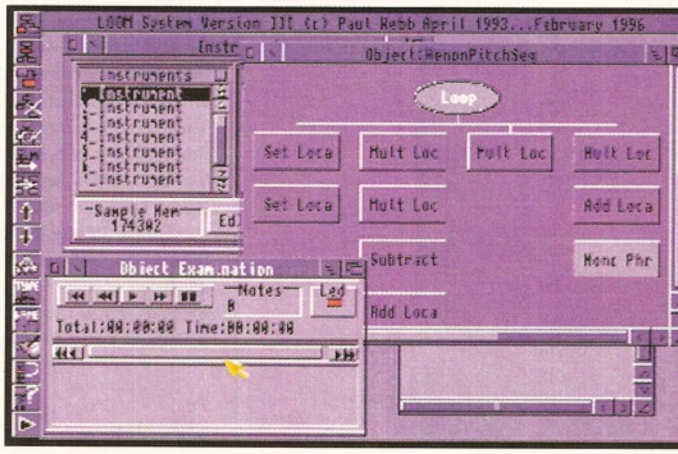
Loom version3

Price:	£31 (inc P&P)
Supplier:	Seasoft Computing
Contact:	01903 850378

Verdict: 15%



The 'family tree' type structure of a typical Object. This one provides harmonies to input note structures – all controlled by a string of variables.



Loom's operating page consists of windows for controlling Objects, instruments and structures. A control strip on the left holds the edit icons.

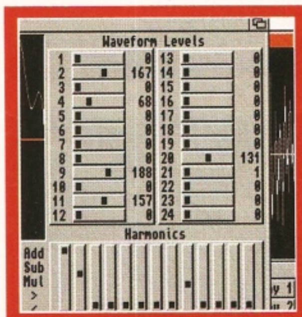
Aural Synthetica

Maff Evans *discovers whether this program can bring full synthesizer power to the Amiga.*

The Amiga has always been considered a very able music-making machine, with cheap, but still more than reasonable sampling on offer and some very powerful MIDI applications. However, there has been little in the way of true sound creation programs. Aural Synthetica attempts to bring the quality of a full analogue synthesizer to any Amiga, not just those with expansion board capabilities. It still needs a pretty pokey Amiga to run properly, including an '020 processor (an '030 is recommended) and a couple of megs of free RAM, but it means that anyone with a 1200 or up can use it.

Model maker

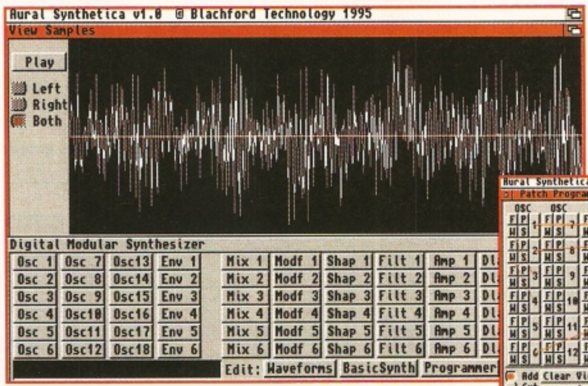
So why does it need all this processing power? Well, rather than just using the Amiga's built-in sound to play the synth tone, you construct a 'patch' by linking modules together and adjusting their various settings, which the program then uses to construct a 'model' of the sound. The model is then used to generate an audio sample which can be saved to disk. Although a novel approach, Aural Synthetica isn't the first program to adopt such a system.

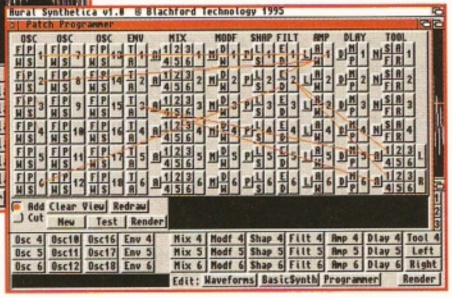


The number of tools for manipulating the raw waveforms is impressive and they can produce great results.



Masses of floating windows can be brought up for individual settings, but they don't all work as you would expect.





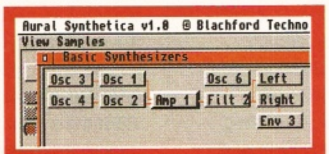
Left: *Even on the main screen a huge bank of buttons is on show to access the edit screens.*
Below: *Synth sounds are built by linking modules in the patch screen. Plan carefully or suffer frustration.*

Users of other platforms have had this kind of technology for years – the classic example is Turbosynth on the Apple Macintosh, although Turbosynth's operating system is more fluid than the complex interface used by Synthetica.

How it works

At the most basic level, you use an oscillator to generate a sound wave. This is probably Synthetica's strongest point, since you can use a lot of powerful tools to generate almost any type of waveform. Unfortunately, it's a complex process and only those who have a strong grounding in synthesis or audio physics will be able to manipulate it with any kind of dexterity. A certain number of standard waves have been supplied, but coming up with new ones will mean a trip to the library to get a text book for many users.

When you've finally got your wave, you can flip to the Patch window, where the actual synth sound is set up. This attempts to recreate the original modular analogue synth architecture, with a load of on-screen boxes that you link together with red lines (simulating the patch leads). What you do is click on the output of one section (say, the wave output of an oscillator) to the input of another (such as the input of an amplifier), which in turn can be effected by an envelope generator. Unless you understand how the structure of a synth works, this could bamboozle you, so a few examples of how things link up in real synths have been included.



Some help is given by example synth configurations. It's a pity that you couldn't put patches together like this.

Sadly, it's still far too complicated to operate in practice, because the screen is so cramped, cluttered and confusing that it's easy to make a mistake. If you do, the computer comes up with a 'PATCH ERROR' message. Yeah, really helpful.

Er... That's not right

The complicated patching isn't the only problem that dogs the program though. One snag that crops up from the off is that when a sound is generated, it attempts to fill the entire memory, so you have to work out how much memory a sample is likely to need before you start. Call me picky, but that's a bit of a chore to attempt before starting work.

Unfortunately, the way that many other edit screens work is also unusual. Not just in terms of the user interface, but in the performance. For example, rather than the cutoff of a filter being varied over time (as every other synth does), the amount of filtering is affected, often giving unpredictable results. When you have to do all your editing then wait a few minutes (not seconds) to hear the results, this kind of quirk is frustrating. You often forget the kind of sound you were trying to create in the first place.

The delay in rendering is inherent in such a system, but it shouldn't mean that creating sounds has to be such a chore. Take Turbosynth for example. That does the same thing, but you create sounds by dropping the required modules on to a grid, linking them with an easy-to-use cable system and clicking on them to edit their settings, thus letting you decide how complex you want to get rather than setting an extremely rigid operating practice.

I thought these criticisms would mellow with time, but the longer I tried to use the program, the more niggling points started to annoy me. The fact that this is the only Amiga program to do the job isn't enough. Music is a creative process – not an exercise in physics and programming. Aural Synthetica's power is buried too deep to make it an intuitive musician's tool. ■

Aural Synthetica

Price: £30 (+ P&P)
Supplier: Seasoft Computing
Contact: 01903 850378

Verdict: 54%

Rexecute

ARexx scripts are sometimes a little slow. Can this new ARexx compiler speed things up? **Paul Overaa** *investigates...*

ARexx is an interpreted language and one of its few faults is that ARexx scripts can be slow when running. This guarantees that the words 'ARexx compiler' always generate interest amongst ARexx users.

Rexecute is an ARexx compiler in the sense that it can produce standalone, executable ARexx programs, i.e. programs that do not have to be run using the RX command. It is also easy to use. Just specify your script file, ask Rexecute to 'compile' it to executable form, and you end up with a version that you can run by double-clicking its icon. This is of immediate benefit to those ARexx users who find that making their scripts Workbench runable by playing around with IconX (and supporting AmigaDOS script files) either tedious or awkward.

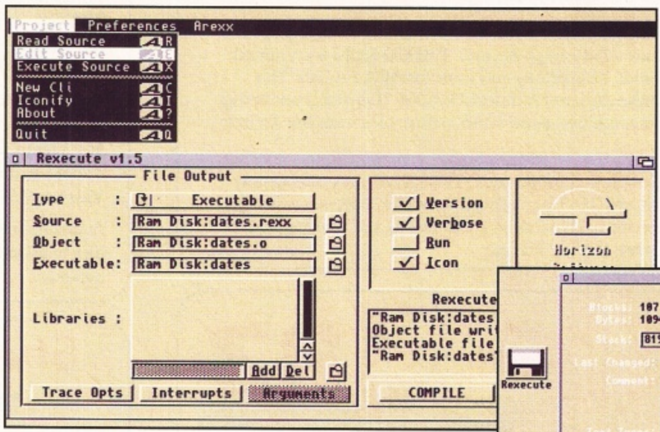
The Rexecute compiler produces four types of output: the executable files mentioned; library object code files that can be added to link libraries of external ARexx functions; object code modules that can be linked to C and Assembler programs; and Rexecute script files. If you're wondering why you would want to compile an existing script file into another script file, it's simple – the Rexecute front end enables you to specify a variety of interrupt and trace options and, when you let Rexecute output a script file, it adds all the appropriate interrupt and trace code statements to your code. It also removes comment lines, making the script more compact.

Save time!

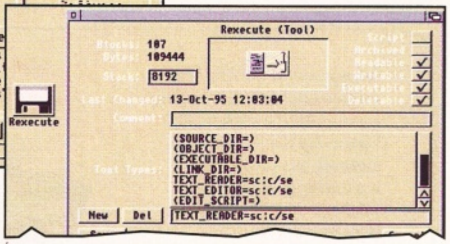
The main advantage of Rexecute, however, has nothing to do with speed. It's that it has a nicely organised scheme for using routines stored in link libraries, where you can create your own libraries and bring particular routines into your scripts by using an #extern compiler directive. Serious ARexx coders will find this feature useful in reducing program development times.

A disassembler that enables you to turn an executable program back into script form, plus a separate librarian utility are also provided as part of the package. If you are programming using C or Assembler then there are other advantages to be had too. For example, you can add your compiled script to a program and execute it as an ARexx command string. One nice touch is that Rexecute itself is fully ARexx controllable and has a list of over 75 ARexx commands which cover practically all of its operations. There is an introductory demo provided that shows Rexecute's front end controllability to good effect.

The documentation (AmigaGuide based), could be improved; although quite extensive, the basic ideas concerning the purpose of the package aren't explained clearly enough for ARexx beginners to understand.



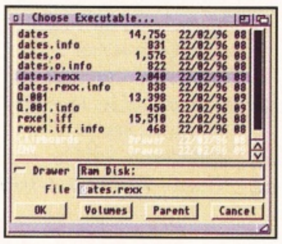
Left: ***Rexecute has an easy-to-use front end.***



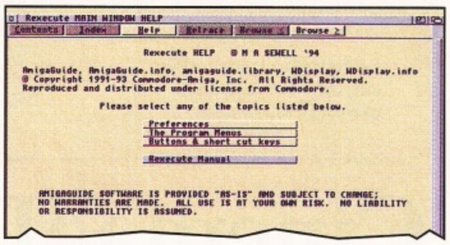
Below: ***It enables you to set things like the editors you wish to use for reading and editing files, using tool type entries stored in the Rexecute icon file.***

It's not what it seems

There are disadvantages that become obvious immediately you start 'compiling' scripts, including the fact that compiled versions can end up significantly larger than the original scripts. One 2K script of mine ended up as a 14K executable! Another disadvantage is that executable files still need to have ARexx up and running in order to run. It was while looking at the reasons for this that I found that Rexecute doesn't really compile scripts at all – it just wraps a directly runable execution environment around them.

DISExec, the Rexecute disassembler, can re-create ARexx scripts from executable versions.



Above: ***The Rexecute AmigaGuide manual is comprehensive, but beginners would probably prefer extra help with some basic principles.***

In fact if you look at the executables produced by Rexecute using a debugger, you will find the original ARexx script buried inside the executable form. ARexx needs to be present then because ARexx is running the script under the surface in much the same way as always. This explains why there are no speed advantages to speak of, and why Rexecute is unable to catch syntax errors in your code during the compiling stage (ARexx is left to catch these at run-time).

I am duty bound to look at Rexecute from a number of different technical viewpoints, but do keep what I've said about the program in perspective. Rexecute is not expensive and ARexx beginners looking for an easy way to produce directly executable scripts, or a more advanced user who likes the idea of using Rexecute's library facilities, will find the program good value for money. ■

Jargon buster

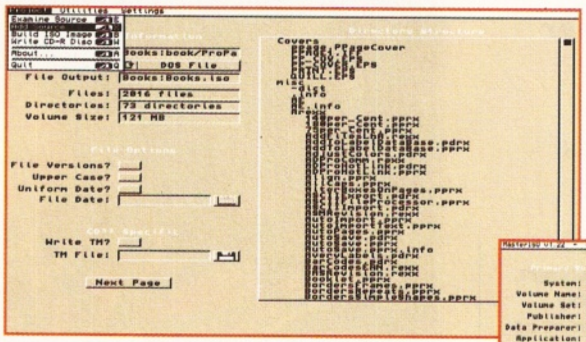
Interpreted Language: **A computer language which works by reading, interpreting and then executing program statements on an effectively line-by-line basis.**
Link Library: **A collection of existing routines that can be added to a program during a special stage called linking; performed prior to running the program.**
RX: **The ARexx utility that is used to run ARexx scripts from a Shell window.**

Rexecute

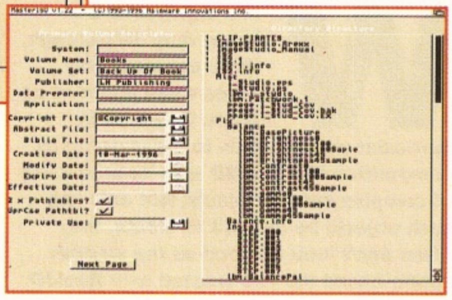
Price: £14.95
Supplier: Horizon Software (UK)
Contact: 01621 778778
Verdict: 82%

MasterISO

Writing information to a CD needs special software – like MasterISO from Asimware. **Larry Hickmott** *checks it out.*



***Left:** Creating a CD is as simple as choosing the files you want, and then having MasterISO build an ISO image ready to be written to a blank CD.* ***Below:** On the second of two screens in MasterISO, you can give your CD a volume name and set many other, more specialised attributes.*



The CD player is one of the most fashionable peripherals these days. It has become standard issue on the PC, alongside the floppy disk drive and hard drive; and it's starting to become popular on the Amiga too.

However, while the 'normal' CD player gains in popularity, another more interesting CD-ROM device is starting to take off in a big way. One of the world's largest computer suppliers, Hewlett-Packard, tell me they are already at full stretch trying to meet demand for their CD-writer, the 4020i, which costs less than £800. However, these units are destined mainly for PCs.

The HP 4020i and others like it, will nonetheless work with the Amiga, although the path to compact disc utopia is far from easy. The problem is hardware. Software such as MasterISO already supports many CD writers. The real limitations lie with the SCSI port you may have on your Amiga.



Not all SCSI interfaces are the same, and while people with boxed Amigas and a SCSI card like the 4091, Fastlane Z3 or Warp Engine, shouldn't have a problem using these cards with CD writers, other SCSI cards for boxed Amigas and the A1200 are an unknown quantity.

When reviewing MasterISO, I expected to be able to use my Squirrel with the Hewlett-Packard 4020i CD writer, which is quite happily (and brilliantly) working on the PC.

However, initial tests in trying to get the CD writer working with the A1200 failed; I will be testing various other SCSI cards to see if this can be overcome. Talking to some SCSI experts, they tend to agree that it's not surprising that I've had problems, because a CD writer is a demanding piece of kit, and the SCSI port has be something special, with a full DMA, to cope.

Therefore, you may have to look a little harder when buying a SCSI card because some of those available for boxed Amigas and the A1200 will not automatically be compatible with all SCSI devices, including CD writers.

Master software

MasterISO from Asimware Innovations is compatible with many CD writers, providing you have an acceptable SCSI card. Unlike other devices such as flopticals, floppy disks and hard disks, writing information to a CD requires special software that can write an ISO image.

A few years ago I thought that this process must be really high tech, but after using a CD writer on the PC and the software on an Amiga, I found 'burning CD images' is almost as simple as copying files using a file manager.

MasterISO takes a set of files and puts them together in one big file called the ISO image. This is then written to CD. When you look at the disk with a file manager, or on Workbench, it appears just like any other disk-based device.

MasterISO makes the process very simple and it only takes a few minutes to set up, while the writing of the ISO image takes a lot longer. Hardly surprising when you can write 600Mb of data to a disc. However, the longest process by far is compiling the data on your hard drive ready for MasterISO.

I have used MasterISO to create ISO images which are transferred on to CD on the PC and a few things about the software are noticeable. One is that it can't do a direct write to CD like I can on the PC. The ISO image needs to be 'built' on the hard drive and then written to CD. This is being changed for version 2, I am told.

Speed control

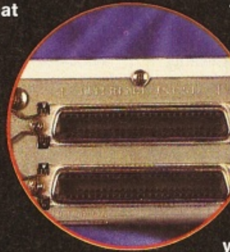
Another function that MasterISO lacks is a feature to set the speed of the write. In some circumstances, it is useful to slow down the write from a dual-speed write to a single-speed write in case of buffering problems. The publishers of MasterISO tell me that speed control will be implemented for version 2. As will multisession support.

However, I found MasterISO easy to use, although I felt Asimware could have provided more information and functions for creating audio CDs. Not everyone will want to create just data CDs, which are dead easy anyway.

From what Asimware have implied, version 2 of MasterISO will be the one to look out for, so check out what the upgrade options are first, because although version 1 does the job, it lacks a number of key features which should appear in version 2. ■

The problem with SCSI

You may be forgiven for thinking that when you buy a SCSI port for your Amiga, you will be able to use it with all those SCSI devices out there in PC and Macintosh land. Not so. In the space of a few days, I had difficulties getting the H-P CD writer to work with the Amiga and then a SCSI version of the GT-5000. Until then it had been fine with a number of normal CD players and hard disks.



Those most at risk from possible incompatibility problems are Amiga 1200 owners. If you have a boxed Amiga like the A4000, then a A4091, FastLane Z3 or Warp Engine tend to be quite reliable (although nothing's perfect).

The moral of this is to check and double check that the SCSI card you want to buy will work with the type of SCSI devices you intend to use.

MasterISO Version 1

Price:	£129.95
Supplier:	Blittersoft
Contact:	01908 261466

Verdict: 85%

MacroForm

Modelling curved or complex models in LightWave can be frustrating. MacroForm aims to make this easier, as **Gary Whiteley** *finds out.*



Deceptively simple-looking interfaces lead to creative, if complex, tools.

MacroForm extends LightWave's capability to produce complex curved models.

While LightWave is a heavy duty 3D package, there are inevitably times when it comes up short. One area in particular where it fails to measure up to competition like Real3D is in its modelling of complex curved objects. Not only can such objects be difficult to create, they often don't look as good as the smooth spline-based models created with Real3D.

Now, I can't say that the results of rendering MacroForm objects measure up to the output of Real3D, but they bring LightWave users closer than models made within LightWave alone. Ultimately, this is because Real3D uses spline and mathematical CSG (definition) procedures to produce its models, whereas LightWave is almost entirely dependent on polygonal objects; so unless your LightWave model is divided into a very large number of polygons, it is unlikely ever to look as smooth as a Real3D object.

MacroForm helps LightWave modellers achieve a smoother look, as well as providing help when modelling objects with complex curves and curved edges. However, the program's makers say you shouldn't use it with LightWave 4, because LightWave 4 makes MacroForm run very slowly. They recommend using LightWave 3.5 until further notice.

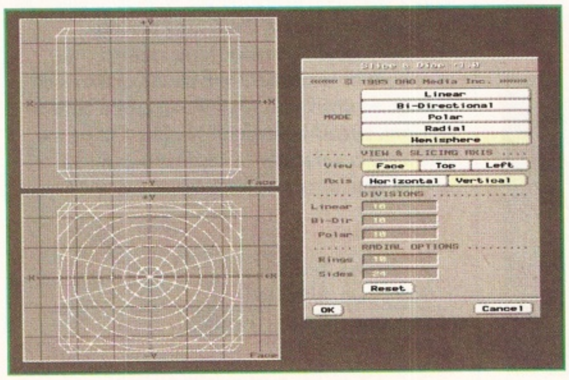
It's an ARexx thing

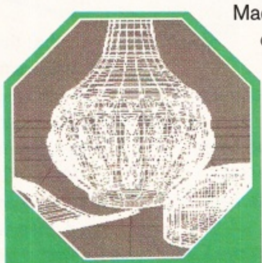
One of the hidden strengths of the Amiga is its ARexx capability, which LightWave makes good use of with its Modeller Macros. MacroForm extends this capability by providing a range of modelling procedures which operate via compiled ARexx scripts. Not only does MacroForm build on Modeller3D's existing tools, but it adds several new ones to turbocharge your modelling. These include a range of powerful Railforming variants including twist, mould, scale and rout, slice and dice (to chop existing objects into bite-size chunks ready for further manipulation), align and centre functions, and distance and angle calculators.

For your money, you get three disks containing MacroForm and a range of tutorial examples to plough through in tandem with MacroForm's extensive, but rather technical and dry manual.

MacroForm isn't for beginners. You need a sound understanding of LightWave's modelling concepts, especially more complex ones like spline curves and free form modelling. It also requires plenty of patience to get through the manual; although it offers many tutorials, most of them load their objects and examples without need for any user intervention. In fact, because the concept of MacroForm is quite different to most of the built-in functions of LightWave it seems hard to get to grips with using it as an extension to M3D. Sadly, MacroForm's manual doesn't explain how to do your own thing with it, relying instead on self-contained tutorials which never give the feeling that you're fully in control.

The slice and dice Railforming variant segments an object ready for further manipulation.





Smooth LightWave objects need lots of polygons to look good.

There isn't room to describe all of MacroForm's many functions, but you can see from the objects in the rendered illustration above that the possibilities are there. A good starting point for many shapes is the NewBox tool, which enables the user to build segmented and round-edged boxes ready for sculpting further. By using Rail-type tools, segmented objects can be moulded in diverse ways by using control and free-form curves to bend, twist, mould and shape simple forms into complex curved objects. Many of these functions can be changed interactively during the modelling process, though some are non-reversible.

MacroForm is a tool for serious LightWave modellers who are not happy with Modeller's shortcomings and want more control over their objects. ■

MacroForm

Price: $215 (about £165)
Supplier: Activa UK & Anti-Gravity Products
Contact: 0181 402 5770

Verdict: 75%

CD check out

Harvesting a bumper crop of CD-ROMs, **David Taylor** *separates the corn from the chaff.*

Our postbag is overflowing with new CD-ROMs again, so we thought it was about time that we covered a whole batch and cleared the decks for the next wave. Ever popular, there are a couple of picture library CD-ROMs, plus a new Aminet CD. There are also a couple of CDs for 3D users and one multimedia presentation.

The Colour Library

There was a time when picture libraries were being released for over £20 each. That's quite a lot for home users to pay for what are supposedly PD pictures. But now, more and more discs are appearing at the much more reasonable £10 mark.

The Colour Library is a multi-format CD, but unlike some it caters very well for Amigas. There's a complete selection of the necessary system files as well as a couple of PD programs, like ImageStudio, for you to use with the images. There's also a custom front end which enables you to search the index, browse through the pictures and view them.

There are 1,700 pictures in total, supplied in a couple of different formats, including IFFs for Amigas. The selection is certainly varied, but so is the quality. Some of the pictures are very good, such as the animals selection, but others are poor-quality scans whose moire patterning betrays the printed source. This is a decent photo library and DTP users are likely to find it useful, but do you really need another picture CD? It's up to you.

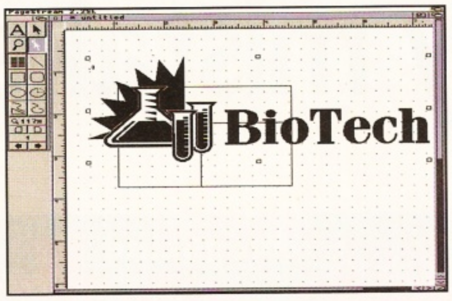
The Colour Library

Price:	£9.99
Supplier:	PD Soft
Contact:	01702 466933

Verdict: 80%

Aminet 10

Aminet is as good a source of new Shareware as ever. It seems that a fair proportion of software uploaded is merely an update of previous software and not original stuff, but there are some brand new utilities and besides, it's always best to have the latest versions of things anyway. The Aminet CD compilers have realised that to justify the frequent release of their CDs, they need to offer a little bit more; so the last few releases have also contained some full commercial software for free. This time it's PageStream 2.2 and a special edition of TypeSmith.



The complete PageStream 2.2 as well as a functioning TypeSmith are on Aminet 10.

What can I say? All the quality of Aminet for you to browse as well as PageStream. It's a bit of bargain really.

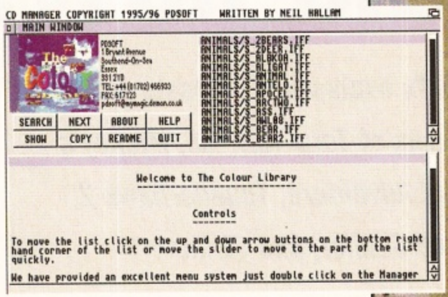
Aminet 10

Price:	£11.99
Supplier:	Active Software
Contact:	01325 352260

Verdict: 90% Star buy

Nothing But GIFs AGA

It's strange that a CD designed for the Amiga with its own AmigaGuide-based interface and everything working directly from the CD should







The Colour Library has a large selection of pictures, over 1,700 in fact, and a custom front end to enable you to browse and view the images. It includes pictures of puppies. Aah!





3D-GFX has a set of objects for many different 3D programs as well as a host of utilities and a lot of example pictures of renderings. It's a fine CD, but might be found a little lacking or incomplete by some people.

contain GIFs. But this one does, so there you go. It means that you might need some software to change the format if you want to use the pictures in some packages. Anyway, the AmigaGuide is easy to navigate and well ordered. The pictures are well chosen and look very good. There are sections for real and rendered, each divided into obvious categories. Amongst some of the finest are the abstract images that are simply enchanting.

Nothing But GIFs AGA

Price: £19.99
Supplier: 17-Bit Software
Contact: 01924 366982
Verdict: 84%

3D-GFX

Here's another well-ordered CD. It contains objects, textures, scenes and projects as well as a selection of utilities. The utilities are very well compiled, but you get the impression that there is actually less here than meets the eye. The textures directory contains remarkably few textures and too often you look into a plurally-named directory to find a single item.

Having said all that, this CD does have a hell of a lot on it, just not as much as it could have done. The directory structure has its clarity to commend it. All in all, 3D-GFX is a very good CD and well worth investing in, but the 12 month development time should have turned up more material.

3D-GFX

Price: £21.99
Supplier: PeeJay
Contact: 0181 985 3850
Verdict: 89%

World Atlas

Well, I did say that M.M.Experience was very capable of creating a professional release and sure enough, here is one. World Atlas is a multimedia CD that must have taken a very long time to compile. There is information on each country presented in a variety of ways. There's a little text about each, as well the national flag and then a set of maps showing lots of different details and positions. The maps are of excellent quality and the final round up of details including population, religion, languages and GDP are very interesting.

The text introduction to each part is the only downside. Although it contains some things that I never knew, even about England, it looks a little sparse. In terms of presentation too, this is the worst area, because of M.M.Experience's one failing – its boring text handling.

However, the index is extremely thorough, linking not only countries and capitals, but dates and products so that you can find out who, what, where and why from almost any angle. When you first start the package you come to the main map, but I found it hard to get back to that map after I'd worked my way through a few levels. It's always possible to move using the Index, but I liked the graphical part for browsing.

This is not a research CD, but more a leisure one to browse through. If you're wondering whether it's worth getting for the educational value for children, I'd say yes, but only if they have a penchant for geography.

World Atlas

Price: £29.99
Supplier: WiseDome Limited
Contact: 0171 702 9823
Verdict: 90% Star buy

Texture Portfolio

Lots and lots of royalty free textures. High quality supplied in JPEG, PICT and Targa format. If you want to use them in commercial renderings you need Ground Zero's written permission. If you're not a 3D artist (or possibly 2D), you'll not be interested. If you are, what more can I say? Nothing. If you need more textures, here you go. ■

Texture Portfolio

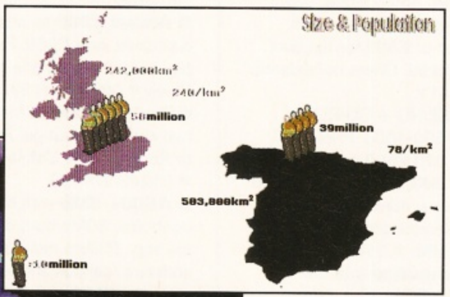
Price: £29.99
Supplier: Ground Zero
Contact: 0117 907 6733
Verdict: 93% Star buy

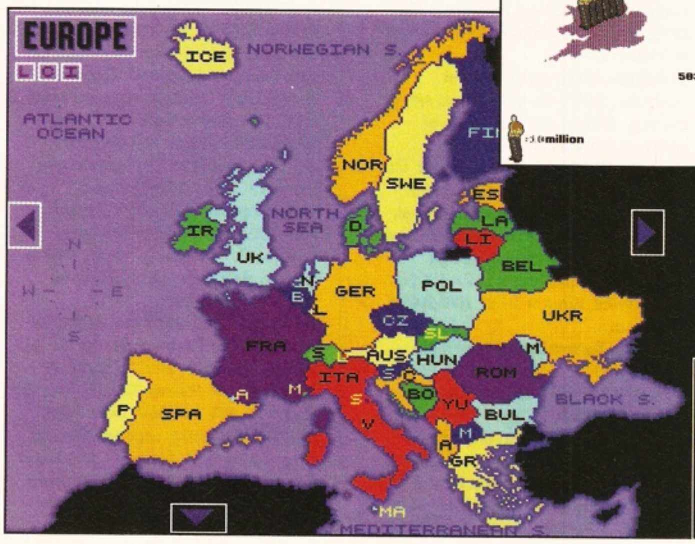


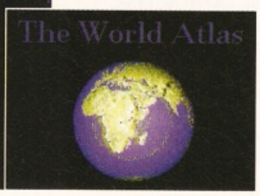
Nothing But GIFs has lots of GIFs and an AmigaGuide front end, as well as index pictures to help you.



Texture Portfolio contains a set of textures. That's it. 'Nuff said.







World Atlas has a graphical front end that gets lost too easily, but it's full of information and top quality graphics.

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● **68020 A2000,** 300Mb HD, SCSI interface, monitor, V34 Supra 288 fax modem, 5Mb RAM and lots of original software. Internet ready with registered AmiTCP, £500. E-mail: Jonathan.Moora@MIRA.co.uk, or call ☎ 01203 355289.

● **CD³² plus SX-1,** plus black keyboard, Network CDs 1 + 2, mouse, joypad, serial and parallel leads, six games, including Tower Assault and Super Stardust. Worth over £600, will accept £300 ovno. Call Stuart on ☎ 0181 698 4276, or E-mail on stuart@draught.demon.co.uk

● **SIMMs 6 x 1Mb** 32-pin. Offers. ☎ 01780 721898, or E-mail: dmclean@worldscope.net.

● **Amiga 486**/50MHz SLC bridgeboard with 4Mb RAM, 16-bit sound card, VGA card and multi I/O card. Price £400. Call ☎ +3531 820 9529 now.

● **Amiga 1200,** Zappo CD-ROM drive, high quality colour printer. Loads of software including Page 4.1. Professional sale due to upgrade. All for £400 ono. Mike ☎ 01452 780482.

● **Power PC1208** RAM card, uses 32 SIMMs and PCMCIA friendly, includes BB clock and FPU socket. £40. PCMCIA card suit A600/A1200, 4Mb, £150. CD³² £95, games included. ☎ 01865 375767.

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● **Amiga 4000,** 6Mb RAM, 120Mb HD, 1942 monitor, LightWave 3D and all system software, all boxed. Will split. Contact CPL Moffat, BMM Rinteln, BFPO 31. ☎ 0049 5722 5953, evenings.

● **DICE C Compiler** v3.01, unused, £80; or will exchange for Real 3D v2.x. E-mail: U9401438@bournemouth.ac.uk, or phone ☎ 01202 789433 (Bournemouth), ask for Rob.

● **For sale!** Mag CD-ROMs, £2 each, including P&P, or five CDs for only £8. Phone Matthew on ☎ 0973 301 882, or ☎ 0181 523 8058 (office hours).

● **For sale!** 50 3.5-inch high density disks, £10 including P&P. Phone Matthew on ☎ 0973 301 882 (evenings), or ☎ 0181 523 8058 (office hours).

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● **For sale:** two Amiga 600s, one Wild Weird Wicked, one Epic with HD. £190 each or £350 for the two! Quick sale required. Offers considered. ☎ 01646 683411.

● **Tandem IDE** HD + CD-ROM controller for 1500-4000. Price £50. Call ☎ +3531 820 9529 now.

● **Amiga A1200,** 10Mb RAM, 85Mb internal hard drive, 40MHz GVP A1230-II accelerator and FPU £600 ono. Contact: Mike ☎ 01626 821315.

● **Power Computing** external quad speed CD-ROM drive, two months old. Cost £199, will accept £165. Mint condition, boxed with manual, leads, etc. Call after 6.30pm. ☎ 0161 230 6914, Steve.

● **Amiga 1200,** Blizzard 4Mb with FPU, 420Mb hard disk, HD disk drive, Microvitec 1438 monitor, fast modem, Squirrel SCSI-II, CD-ROM drive, speakers, sound sampler, mouse, two joysticks, hand scanner, over 1,200 disks of software, CD software. £1,100 ono. Phone Redcar ☎ 01642 474599, ask for Andrew.

● **GVP HC8-II,** 50Mb HDD, 2Mb RAM, £120, A2286 emulator, 3.5-inch and 5.25-inch floppies, £80. Future Domain smart SCSI I/O PC card £25; all with manuals, software and cables. ☎ 01296 22669.

● **Imagine 4,** just arrived from Impulse USA. Bargain at £75. Also LW3D for good offer. Call ☎ 01405 860798, evenings or weekends.

● **A1200 Desktop** Dynamite, 6Mb RAM, 540Mb HD, 50MHz 68030, vgc external floppy, all boxes and manuals £750 plus postage. Call Mike ☎ 0131 346 7665, after 7pm.

● **Megalosound 8-bit** stereo sampler, brand new, still shrink-wrapped in original box with full software, manuals, etc. £15. Write to: David J. M. McCorkell, 27 Dalriada Walk, Ballymena, Co. Antrim BT42 4OY.

● **SIMMs, 1Mb,** 72-pin SIMMs, £17.50 each, or four for £60. Phone ☎ 01362 694976, ask for Barry.

● **A1200 with** 120Mb HD, software worth £300, plus games and magazines, excellent condition. £300. Goliath 22Watt power supply, new, £40. Amiga Computing since 1994 with disks, £1.25 each. Kiran ☎ 0181 575 8489.

● **Amiga Video** Back-up v3.0 and v1.5, store 150 disks to tape or back-up H/D. £25 P&P free. ☎ 0161 790 0962.

● **Amiga 1200** as new, plus extra disk drive, only £250. Price includes pay on delivery service by Parcel Force. Steve ☎ 0973 814123.

● **Amiga genlock** for sale. I have two and one must go. Rendale 8802 or Rocgen Plus. Call for details. David ☎ 01247 274408.

● **A500+ 5Mb** with hard disk controller, 80Mb hard drive and extra memory. Phillips monitor, loads of software (serious and fun), with manuals. £360 and Amiga games. Call Kiran after 6pm ☎ 0181 575 8489.

● **PC Task 3.1,** boxed with manual, £45; Amiga Shopper's with disks since 1993 £1.25 each the lot; Amiga Format with disks since 1994 £1.25 each the lot. Kiran ☎ 0181 575 8489, after 5pm.

● **85Mb Seagate** 2.5 hard disk £40, 4Mb 72-pin SIMMs £30. Phone ☎ 01273 553266, ask for Patrick.

● **A1200 with** 127Mb H/D packed with application and games software. Original boxes, manuals, etc. included. Joystick, etc., etc. Phone for details; asking price £330. Call David ☎ 01247 274408.

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● **A4000/40** with 214Mb hard drive, 8Mb RAM, multisync monitor, CD-ROM, LC200 printer, including Scala MM220, DP4, PageStream, DirOpus 4, Wordworth, excellent condition. £1,500. Phone Julian ☎ 01865 376697, evenings.

● **A4000/040** 68882 FPU, 10Mb RAM, 320Mb HD, Philips monitor, excellent condition, original software, including LightWave 3D. Colour digitiser, 1,000 misc. floppies, books and magazines. £1,200 in total. ☎ 01424 446359.

● **For sale!** 100 5.25-inch high density disks, £7.50 including P&P. Phone Matthew on ☎ 0973 301 882 (evenings), or ☎ 0181 523 8058 (office hours).

● **A1200 420Mb** hard drive, US Robotics 14,400 fax modem, original software and games. Immaculate condition, £330 ono. Call Carl on ☎ 01455 552409.

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● **AMOS Pro Compiler,** IntOS £35; Directory Opus v4 £10. All complete with boxes and manuals. Mastering Amiga DOS 2 books, volumes 1 and 2 £10. ☎ 01206 573634.

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● **Alpha Data** HD drive, 40Mb for A500, £100; Theme Park, AMOS 3D, AMOS Compiler, all £15 each, all boxed; Action Replay III, £15. Phone Baz ☎ 01302 337839, Doncaster.

● **CD³² for sale,** Diggers, Oscar, Microcosm, Now Games 1 and Lamb American Challenge. 14 Coverdiscs. Phone Rory on ☎ 01343 542096. Offers around £90 ono.

● **DCTV 24-bit** digitiser and 24-bit paint package. Plays back hi-res 24-bit anims in real time. Records straight from box. Great for 3D animators, £100 including postage. Martin ☎ 01298 22862.
● **Amiga 1200,** plus GVP 6830 Turbo accelerator, 10Mb RAM, 120Mb hard drive, Zappo CD-ROM drive. Plus 3D programs. Total worth £1,100, will accept £650. ☎ 01924 862063.
● **Amiga 4000/030** with 16Mb RAM, 249 HD, Microvitec 1438 monitor, external disk drive, GVP 4008 SCSI board, colour hand scanner, plus games. £2,000 ono. Call ☎ 0161 284 9435, ask for Mike.
● **International One** Day Cricket, good condition, fully boxed with manual. £8. Ring Philip on ☎ 01702 714174. Please phone between 9am and 7pm.
● **A4000 030,** 6Mb RAM, 320Mb HD, 68882 FPU. Microvitec multisync monitor. Citizen HQP-40, 24-pin colour printer and external floppy drive. Also 4Mb GVP RAM and software. £1,200 ono. Phone Derek ☎ 01483 505801.
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● **Wordworth 2** plus The Publisher, Interbase; all original disks, manuals. Also manual only for Kindwords 3. £50 the lot. Scala HVT100 with manual £30, or swap lot/Blizzard 1220/4 4Mb RAM add-on. ☎ 0181 575 7558.
● **A1200, 6Mb** RAM, 240Mb hard disk, 50MHz 68030 and 68882, Phillips CM8833-II, Canon BJ-200, Roctec Roclite, GVP D558+, software and magazines. Excellent for DTP. £1,000 ono. Phone Oliver on ☎ 0121 354 7843.
● **CD32 with** SX-1 expansion module and keyboard, mouse, 80Mb hard drive, one floppy drive, 3Mb total memory. All for £300. Call David on ☎ 01257 400481.
● **Amiga 500+** for sale, 2Mb RAM, GVP 52Mb hard disk, Philips CM8833-II colour monitor. Much software, gold disk office, Deluxe Paint IV. Plus Naksha mouse and disks. £325. Phone ☎ 01252 713822.
● **A1200 4Mb** RAM on Hawk board, 540K HD, Archos duel speed CD external disc drive, B/W hand scanner, games and DTP software galore. £650 ovno. Call Ray ☎ 0256 497 518.
● **A1200 127Mb** hard drive, 4Mb RAM expansion, external floppy drive, genlock. Ideal for DTV software, includes applications and games. Will split. Best offer takes the lot. Call David on ☎ 01247 274408.
● **A1200** Workbench 3.0, MUI 3.2, WB 2.0, registered versions, 120Mb hard disk, external floppy, A1230 68030/68882, 40MHz, 8Mb RAM, Microvitec monitor 1438 200, PowerCD drive (2x) with CD's (two weeks old), Squirrel SCSI interface, Megalosound, two joysticks, Final Writer 4, Imagine 3.0, DirOpus 4.11, ImageFX 1.5, Zyxel 14.4 modem, software and games. All in perfect working order. Included a one month warranty. All this for £1,400 ovno. Clive Hollans, E-mail: te940192@newi.ac.uk, or ☎ 01352 759722.

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● **GVP A530** HD/accelerator wanted. Any spec, any condition, even broken! Call Keith on ☎ 01567 820816 now!
● **Wanted:** Workbench 3.0 OS. Write to: Marcus Lord, 60 Bedford Avenue, High Crompton, Shaw, Oldham, Lancs. OL2 7DW. ☎ 01706 840116 between 5pm-6pm. All week.
● **Hilsea Lido** £9.99, Sim City 2000 £15, AMOS Pro £15, Gloom £12, Roadkill AGA £10, Tornado AGA £10. Contact Dave Hogben at 128 Gaston Way, Shepperton, Middx. TW17 8ES.
● **Wanted:** Powerscan 4 colour, or Epson flatbed, ProGrab 24RT and must be latest version, A1200 Blizzard 030 accelerator, with or without RAM. Call Paul before 5pm on ☎ 0113 255 5585.
● **Amiga 2000**/3000/4000 keyboard, reasonable price paid. Any condition considered. ☎ 01203 675299.
● **Wanted:** ADI Junior reading 4/5 6/7. Please write to: Randall, 107 Hornhill Road, Maple Cross, Rickmansworth, Herts. WD3 2TG.
● **A3640 040** daughterboard to upgrade 4000/030 to 040CPU. Cash waiting for your chance to upgrade. Call David ☎ 01247 274408.
● **Amiga 500** users from anywhere as contacts or would sell or swap. Lend me an operating manual for the Zappo SCSI 3.5-inch HD. Please drop me a few lines: Steven P. Hyde, 20 Charles Street, Rugby, Warks. CU21 2EW.
● **Internet users!** I need my anims uploaded on to Aminet. Want to help? Jonathan, RM21, Hampshire Block, North Hampshire Hospital, Aldermaston Road, Basingstoke RG24 9NA.
● **Excellence** word processor with thesaurus and dictionary. Please ring Leicester ☎ 0116 291 1323.
● **AMOS Pro** Compiler. Will pay fair price. Call me on ☎ 01692 404642.
● **Wanted for** Amiga A500. DataFlyer or GVP or similar SCSI hard disk. (Basically to run a Quantum type hard disk.) Call Dave ☎ 01522 684590.
● **Aladdin 4D** must be A1 condition. Will make good offer and pay P&P with manual. ☎ 01469 576487, home ☎ 01469 577088, South Humberside. Ask for Mac.
● **Analog joystick** for A1200. Please ring ☎ 0151 355 8763.
● **GVP HD8+** hard drive for Amiga 500. ☎ 01758 612615.

PERSONAL

● **Pen pals** wanted to swap games, software and tips for Amiga 1200. Send your lists to: Zoe Green, 35 Constantine Place, Baldock, Herts. SG7 6ST.
● **Want to get** more from Blitz BASIC? Write to: Blitz, M. Tillet, 27 Hillside Avenue, Worlingham, Beccles, Suffolk NR34 7AJ. Monthly magazine on paper.
● **Pentrisoft,** the programmers' user group. Tips, advice and contacts. Free membership. Write to: Mark Harman, 3 Highlea Close, St. Leonards, o/s, East Sussex TN37 7SS for details.

FANZINES/BBSs

● **Visions**. A new SF/fantasy/horror fanzine (printed) needs fiction and artwork for issue one. Send S.A.E. for full details to: S. Kennedy, 41 Larwood, Worksop, Notts. S81 0HH.
● **No Limits BBS** 01293 413668, v34+, 1.2Gb, Xendrix Pro software, very friendly SysOp, free call to other Eurobell subscribers, complete Fidonet backbone, many other networks, perfect for points. Binarynet HQ!
● **Echoes BBS**, Camberley, Fidonet, Sportsnet, plus many more. Always the latest Aminet CD-ROM online. Free pointing all networks, Xenolink Pro software, friendly, helpful SysOp. All welcome, 24 hours 01276 62099.
● **Entity's a** new diskmag that aims to keep Amiga alive by getting you creating. Issue one and two ready. Contact: Jono, 25 Denness Place, Llandudno LL30 2UX, for more info.
● **New Amiga** diskmag. Only £2 for two disks on AMOS, Imagine, PD and lots more. Contact me via post for info: Jono, 25 Denness Place, Llandudno, Gwynedd, Wales LL30 2UX.
● **Mogsy's BBS.** Contact Anthony Morris on ☎ 01772 496590. Amiga only! Over 1,000 files on-line and CDs to choose from! Speeds 2400 to 28,800. 24 hours. Call today!
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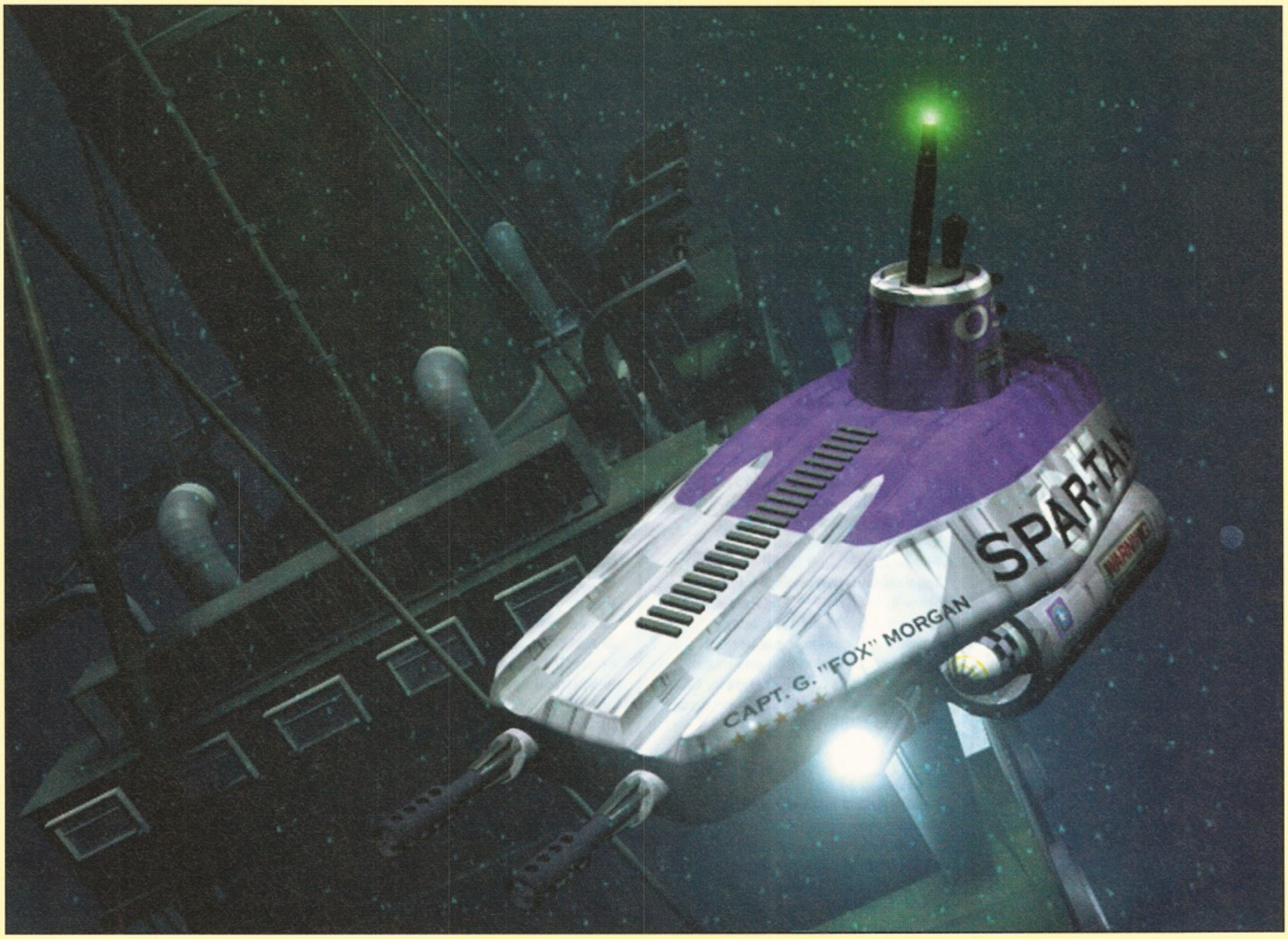
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Gary Coulter' lovely picture shows the quality achievable when different machines work in harmony, instead of being separate entities. The renderings were done in LightWave on the Amiga with textures done in Photoshop on the PC. Remember, even if your picture doesn't win here, we may still use your efforts elsewhere in Amiga Shopper. If you want to win £25, send your picture as a JPEG to: **David Taylor, Amiga Shopper, Future Publishing, 30 Monmouth St, Bath BA1 2BW.**



If you are stuck with a problem on your Amiga and you just can't find a solution, write in to Amiga Answers, where our panel of experts are here to help you. They can deal with all sorts of problems; DTP, video, music, Operating Systems, monitors, word processing, programming, Workbench, networking – anything that you can do with your Amiga, in fact. Just fill in your details in the form on page 57 and send it in!



Paul Overaa is our Operating Systems programming expert. He has written several books, including: Mastering Amiga Assembler, Mastering Amiga ARexx and Mastering Amiga C. His main interest is in program design and he is heavily into the music side of the Amiga. Paul's other interests include red wine, maths and wind-surfing!



Gary Whiteley is our expert on video and graphics. He regularly produces work for films and TV. Gary has also written several books on his favourite subjects – amongst them is Amiga Desktop Video, published by Future Publishing (call ☎ 01225 822511 to order a copy). Gary also regularly reviews new products for Amiga Shopper.



John Kennedy is our hardware and music expert. John has written Supertests and features alike for Amiga Shopper in the past, including the CD-ROM Supertest in issue 49 and our monitor Supertest in issue 55. He has written our CanDo Coverdisk instructions this month, and he is co-writing our music tutorial with Darren Irvine (see page 60).



Larry Hickmott is our DTP and word processing expert. He produces his own DTP magazine called Em and has written several books, including The Wordworth Companion for Digita and Future Publishing's books division. This month Larry answers your queries in Amiga Answers and has also written the review of MasterISO on page 45.

Amiga answers

Adding fonts to PPage

Software

I have recently purchased a CD with thousands of CompuGraphic and PostScript type 1 fonts and want to know how I can use them with ProPage. Can you tell me what I need to know to install the fonts and also whether I need to convert the PostScript fonts when I already have the CGFonts.

Lawrence Sparks
Stevenage

ProPage can make use of two types of fonts, Amiga bitmaps and CompuGraphic fonts. If you intend using a PostScript printer, ProPage also requires a PSFont which is the PostScript equivalent of a CGFont used on-screen.

Forget about the Amiga bitmap fonts that come with ProPage, unless you want to use them as your screen fonts when using a PostScript printer. In other words, on-screen you would use the Amiga bitmap font Times, and then when that page is printed to a PostScript printer, the PostScript type 1 version of Times in the printer is used to print the page.

To install CGFonts for use with ProPage 4, you need three files for each font. Using the example of Times again, the three files would be called; Times.dat, Times.metric and Times.lib. As you can see, the name of the font remains, while the extension changes. When installing a font for ProPage you have to make sure that you have one of the three extensions present after each of the three files. Older versions of ProPage used an extension called ".atc" but this is no longer required.

To install the CGFonts, use a file manager such as Opus or DirWork to copy the three files to the directory called CGFonts. Now go to Workbench and find the utility in ProPage's drawer called CG_Update. Double click on this and it will update a couple of files in CGFonts so ProPage can use these new fonts.

In some instances, you may find that when you run ProPage, the new fonts are not listed. To correct this, go to CGFonts using your file manager (Opus, etc) and delete the file called "fontlist.pp". Now reset your Amiga and run ProPage again. The fonts should now be visible in your typeface requester.

The final question about whether to use the PostScript type 1 fonts on your CD depends on whether you use PostScript printers or are ever likely to in the future. If the answer is yes, then use Font Manager to convert the Type 1 fonts to a CGFont for use with ProPage, as well as answering yes when asked if you would like the downloadable printer fonts copied to CGFonts:PS.

That way, you will have your CGFonts for use on-screen and if you ever print to a PostScript printer, and you select "Include Downloadable Fonts" in the "Print to PostScript" requester, the PSFont created by Font Manager will be included in the PostScript file for use by the PostScript printer. My advice is don't burn your bridges and click yes to this option in Font Manager. At worst, if you want to save on disk space, you can copy all your PSFonts from the PS drawer in CGFonts to a floppy disk until the day comes when you require them. **Larry**

Fountain

Beginners

My son has tried to load Fountain from the Extras 2 disk of his A500 Plus (Workbench 2.04). No matter what we do it comes up with an "unable to open library 37" error message. We've tried running the program from hard disk and from the Workbench floppy.

Any ideas on what is going wrong and, more importantly, how we can fix it?

A. Jarvis
Southsea, Hampshire

Fountain is the old version of the Amiga outline font utility that is now called Intellifont. You need at least version 37 of a library called the diskfont library to run the program. This library should be in the libs: directory of your hard disk, but the error message is telling you that the library isn't there! Although I haven't got a Release 2 Amiga around, I believe that the

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Answers contents

If you're looking for a particular problem, this handy index will help you find the answers you need:



ProPage can make use of two types of fonts, Amiga bitmaps and CGFonts.

ProGrab problems

I recently bought a ProGrab 24RT Plus video grabber and was so impressed with the stills I got from it that I thought I would invest in the PCMCIA interface as well.

I was particularly drawn to the fact that it (apparently) allows animations to be grabbed direct to hard disk. The problem is, however, that this feature does not appear to function on my machine.

The equipment I'm using is as follows: A1200 (circa 1993); 80Mb IDE hard disk with approximately 30Mb free; 4Mb 32-bit Fast RAM; Panasonic SD40 video recorder (with SCART input); ProGrab 24RT Plus with PCMCIA interface.

OK, what happens is this: I select the options to grab a colour animation to disk. Then I go to the grabber interface and, sure enough, it is standing ready to grab. So – I can now do one of the following:

1. Use the RECORD button: which generates a series of numbered files on my hard disk in an unknown file format (even the ProGrab software cannot re-load them). The decoded animation is blank (completely black) and when saved to disk using the SAVE ANIM option the resulting files are full of garbage (and often software like Viewtek refuses to play them). The anim file is usually surprisingly short, suggesting to me that it may be incomplete.

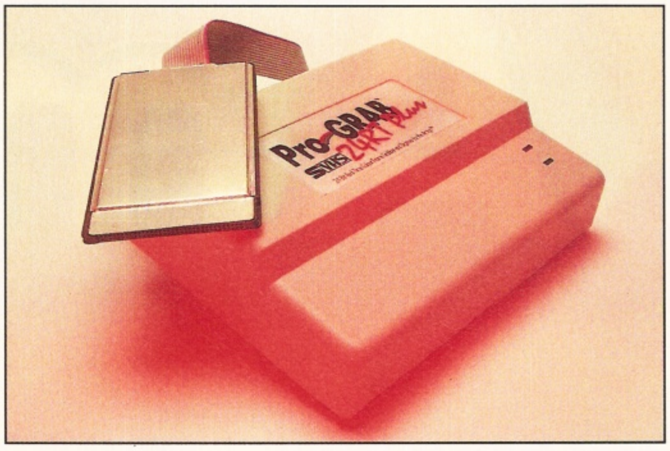
2. Click on the preview window: in which case 19 or so numbered files are written to the disk (as above). This happens despite the fact that I asked for more than 19 frames. The frames *do* appear to have stuff in them when decoded, but once again the SAVE ANIM option produces a garbage/unusable/incomplete(?) file. (Oh, by the way, the hard drive isn't anywhere near full after the grab and save is finished!)

The strange thing is that when grabbing animations to RAM it all works fine. The animation (black and white or colour) is grabbed and decoded correctly, and the resulting Anim file is fine.

My only suggestions could be that faster hardware is needed (i.e. faster CPU, RAM or HD), or that the software is incomplete and that this feature simply does not work! However, the ProGrab advertisement and documentation do not comment on either of these things!

If you could help me out I would be *very* grateful. If not, do you know an address to which I can write (or E-mail)? The only details I have are for the mail-order hotline. I've also tried asking for advice in UseNet Amiga newsgroups, but to no avail.

Simon Morris
Liverpool via E-mail
fish@csc.liv.ac.uk



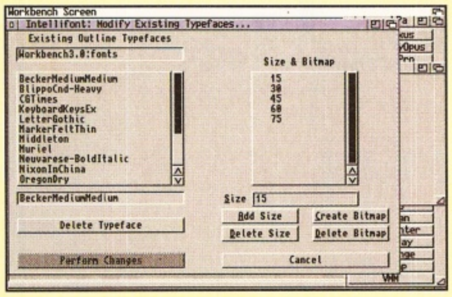
Gordon Harwoods ProGrab 24RT Plus digitiser was reviewed in our September 1995 issue where it was awarded 95 per cent!

Since you say that grabbing to RAM works fine there's obviously no problem with your ProGrab Plus functioning correctly (at least as a video grabber). On the other hand, it may be that there is a problem with the way that your hard drive is set up. Perhaps your MaxTransfer value needs changing to enable the data to be written correctly to the drive. My advice would be to call Harwoods (makers of the ProGrab) on ☎ 01773 836781, explain your problem and ask for technical help. OK, it's the sales hotline, but I'm sure that they could be persuaded to pass you on to someone more knowledgeable, or at least give you another number to call for technical support. After all, if there's a problem with a piece of their kit, there should be some way to contact them to try and find a solution! **Gary**

diskfont library used to be stored on the Amiga Fonts disk and, presumably, your hard disk installation didn't install this library in the libs: drawer for you.

If this is the case, the missing library problem is easy to fix. Insert your Amiga fonts disk, double click on it, and then select the 'show all files' option from the Workbench menu. This enables you to see files and drawers even if they do not have icons. Look through the drawers and files present and locate the file called diskfont.library (if this file is not on the Amiga fonts disk, rest assured that you will find it on one of the other Amiga system disks).

Having located the diskfont.library file, double click on your Workbench icon and use the 'show all files' menu option again in order to display the normally-hidden Workbench drawers. You will see a drawer called libs.



Intellifont is the new version of the Amiga outline font utility.

Double click on it to open its window and then, if necessary, rearrange the positions and/or sizes of the libs window and the one containing the diskfont.library so that you can see both windows at the same time.

Now, use your mouse to move the Workbench pointer to the diskfont.library file and press and hold down the left mouse button. If you keep the left mouse button depressed, you'll find that you can drag the file over to the libs window. If you do this and release the left mouse button the diskfont library will be copied to your hard disk's libs directory and your missing library errors should stop. ***Paul***

Gadtools buttons

I have a question regarding C, Intuition and Gadtools and, because you are the only real technical Amiga mag, I thought you might be able to help me out. I'm writing a program that, as part of its user interface, needs a pop-up gadget similar to the ones found on the Mac. I know I could simply use a cycle gadget and cycle to menu, but I don't like the way C2M works.

I've already written the code that pops the gadget on to the screen, waits for the user to select an option, and then returns the selection back to the main loop. The routine doesn't use BOOPSI because I don't understand it yet. Instead, I coded the gadget myself and use mouse co-ordinates to find out where the user is within the gadget. However, after a user selects an option, I want to change the name of the button gadget (this is a standard Gadtools BUTTON_KIND gadget), to reflect the selection that the user has just made.

I tried removing the gadget in question and changing the ng.ng_GadgetText pointer to the new string, adding the gadget back again and refreshing the gadget list, but to no avail. I also tried changing both the ng.ng_GadgetText and the Gadget->GadgetText->IText pointers, but the gadget still keeps the same name as when it was originally created.

So, where does Gadtools keep the pointer to the string of the Gadgets text?

Matt Gorner
Radford, Coventry

I have no idea, but I do know that it isn't in the gadget's intuitext IText field. The button gadget text pointer, and most other Gadtool gadget structure fields, are private to Gadtools and as such are not published. They shouldn't be altered either, because these internal field arrangements could change with subsequent OS releases.

As you've probably realised, there are no tags to dynamically alter Gadtool's button text via the GT_SetGadgetAttrs() function, but there is however, still a way to do what you want. You will need to remove the gadget from the list, free it so that Gadtools releases whatever associated resources it was using, alter the text

in the NewGadget structure, and then make another call to the Gadtool CreateGadget() function to produce the new gadget.

You will, of course, have to clear the NextGadget field of the gadget you remove, otherwise the FreeGadgets() call will remove the gadget nodes further down the list. Because of this the gadget removal fragment will actually end up looking like this:

```
RemoveGadget(window_p, gadget_p);
gadget_p->NextGadget=NULL;
FreeGadgets(gadget_p);
```

Once the gadget has been dismantled in this way you can modify the text in your NewGadget structure and create a new gadget using this sort of code:

```
newgadget.ng_GadgetText="SOMENEWTEXT";
previous_gadget_p=CreateGadget(BUTTON_KIND,
last_gadget_p,&ng,TAG_END);
```

Having done that, you will then need to use the RefreshGadgets() function [or RefreshGList() if you like], followed by a call to the Gadtools GT_RefreshWindow() function:

```
RefreshGadgets(gadgetlist_p,window_p,NULL);
GT_RefreshWindow(window_p,NULL);
```

This will update your gadget display and give you your new button gadget text label! ***Paul***

Modifying a StartUp Sequence

General

When I use my A2000 (Workbench revision 27.75, Kickstart 2.1) for rendering, multitasking or any memory-intensive application, I like to keep memory overheads as low as possible and so use a StartUp with the bare minimum, i.e. MUI, ASSIGNWEDGE, ARQ and FASTMEMFIRST only. When, on the other hand, I wish to do my 'housekeeping', for which I use DOpus4, I would like to switch in other utilities like Blanker. Is it possible to add a branch somewhere in the User-StartUp to query current requirements on boot up, and if so how?

Simon Smalley
Devonport, Plymouth

You're running Release 2 of the Operating System, so if you look at the main StartUp-Sequence file in the s: directory, you'll see, towards the end of the script, some lines that read like this:

```
IF EXISTS s:User-Startup
      execute s:User-Startup
EndIF
```

In other words, the commands in your User-StartUp file are being performed near the end of the main StartUp-Sequence via the AmigaDOS Execute command. You can easily alter the appropriate StartUp-Sequence lines to execute any number of separate User-StartUp scripts if you wish.

For your purposes all you need is a couple of independent script files. Let us suppose you create two different User-StartUp script files called User-StartUp1 and User-StartUp2. To get either, or both, of these files executed at boot up time just use ED (or some other text file editor) to alter the StartUp-Sequence fragment that I mentioned above. Change it so that it uses this sort of conditional test scheme:

```
IF EXISTS s_User-Startup1
    ASK "Run User-Startup1 (Y/N)?"
    IF WARN
          execute s:User-Startup1
    EndIF
EndIF

IF EXISTS s_User-Startup2
    ASK "Run User-Startup2 (Y/N)?"
    IF WARN
          execute s:User-Startup2
    EndIF
EndIF
```

When you next boot your machine the two prompt lines will appear in turn asking you whether you want to run, or not run each particular script. Just enter Y or N accordingly and you'll get only the User-StartUp(s) that you choose! ***Paul***

HiSoft BASIC 2 snag

Coding

Help! I think I have found a 'genuine problem'. I'm grappling with HiSoft BASIC 2 and have been playing around with the Intuitext example on the Work disk. There is a line in the listing (line 51) that calls a subroutine called InitIntuiText(). I was sure that if I changed the drawmode being used, from JAM2& to INVERSVID&, the text would be printed in inverse mode but for some reason this doesn't happen.

I rang HiSoft, but although they managed to reproduce the problem, they couldn't figure out how to fix it and suggested I hit the RKM manuals. I am desperate – upon more playing around it seems that the pens cannot be set properly!

David Storey
Horsham, West Sussex

I've taken a look at the HiSoft example you mention and you are right – the lines that do the IntuiText printing stuff, namely:

```
InitIntuiText myItext(),mytextpen,mybackpen,
        JAM2&,0,0,textattr(),"hello there",0
PrintItext
PEEKL(win&+rport),VARPTR(myitext(0)),50,50
```

...aren't working properly. By replacing JAM2& with INVERSVID& you would expect the text to show in inverse characters and it doesn't.

The reason lies in an error in the InitIntuiText() subroutine which I've reproduced in listing 1 so that other readers can see the sort of code that you are talking about. The suspect line is the one that pokes a drawmode value into the IntuiText structure:

```
POKEW t&+IntuiTextDrawMode,drawmode
```

The IntuiText DrawMode structure field is byte sized, not word sized, so the routine should be poking an 8-bit value into the structure, not a 16-bit value.

Listing 2 shows the change needed to get the routine working and you'll find that with this alteration in place your inverse text will appear when you use the INVERSVID& flag in the subroutine call.

```
SUB InitIntuiText(T(1),BYVAL frontpen, BYVAL
backpen, BYVAL drawmode,
BYVAL leftedge, BYVAL topedge, font(1),
textstring$, BYVAL nextptr&) STATIC t&
t&=VARPTR(t(0))
POKEB t&,frontpen
POKEB t&+IntuiTextBackPen,backpen
POKEW t&+IntuiTextDrawMode,drawmode
          <-----THIS IS WRONG!
POKEW t&+IntuiTextLeftEdge,leftedge
POKEW t&+IntuiTextTopEdge,topedge
POKEL t&+ITextFont, VARPTR(font(0))
POKEL t&+IText, SADD(textstring$+CHR$(0))
POKEL t&+NextText,nextptr&
END SUB
```

Listing 1:
The original InitIntuiText() routine.

```
SUB InitIntuiText(T(1),BYVAL frontpen, BYVAL
backpen, BYVAL drawmode,
BYVAL leftedge, BYVAL topedge, font(1),
textstring$, BYVAL nextptr&)
STATIC t&
```

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FAQ

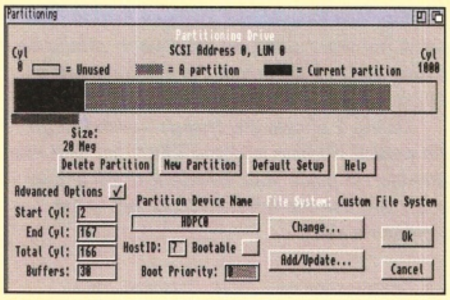
The best way to grab

Buying

I need to get some 10x8-inch colour photographs into my Amiga (A3000, 6Mb RAM, HD). Which is the best approach – video grabber, hand scanner or flatbed scanner? I already have an S-VHS camcorder, so would a video grabber be the way to go?

The answer to this dilemma is mainly dictated by how much you can afford to spend, since in this case money is directly related to quality. Flatbed scanners give the best result, because they provide far more resolution than all but the very best, broadcast quality cameras. Although video grabbers are more flexible, since they can usually capture stills or moving sequences from camera or tape, the overall quality will generally be noticeably worse than your average flatbed scanner. Hand scanners don't do such a bad job, but because of the limited size of their scanning head and the fact that they are manually controlled, you'll probably find it difficult to make the several passes required to scan all of your photograph and then accurately join the strips together into a finished image. So the best solution is to plump for a good quality flatbed scanner.

Take note, however, that 6Mb of memory may not be enough, especially if you want to post-process your images with a 24-bit paint program or image processing software such as Art Department, since high resolution scans can gobble up memory. Think about adding at least 4Mb of extra RAM. Gary



Make sure that the drive is not selected as bootable; this stops the DH5: icon from appearing on Workbench.

```
t&=VARPTR(t(0))
POKEB t&,frontpen
POKEB t&+IntuiTextBackPen,backpen
POKEB t&+IntuiTextDrawMode,drawmode <--- CHANGE
NEEDED
POKEW t&+IntuiTextLeftEdge,leftedge
POKEW t&+IntuiTextTopEdge,topedge
POKEL t&+ITextFont, VARPTR(font(0))
POKEL t&+IText, SADD(textstring$+CHR$(0))
POKEL t&+NextText,nextptr&
END SUB
```

Listing 2:
The modified InitIntuiText() routine. ***Paul***

A happy genlock owner

Video

This response is intended to offer a little help and advice to Nick Grundy ("More genlock thoughts", AS59), with regard to his genlock difficulties. I now have an A1200, along with an Archos Overdrive (540Mb), Turbo 2Mb memory expansion, a Rombo digitiser and a Rendale 8802 genlock.

After using the genlock for three years, initially with an A600, I experienced a compatibility problem with a recently-purchased monitor and the through port on the genlock.

I called Rendale in Northampton, who dealt with my enquiry over the telephone almost instantly, very professionally and, even more rarely in these times, knowledgeably. What's more, the answers they gave were in terms which even I could understand – not in some jargon-laden, technical gobbledygook.

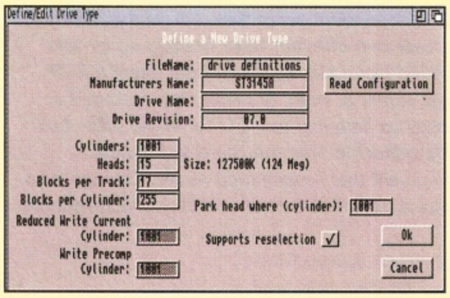
The outcome was that I took my genlock to Rendale's workshop, where the necessary upgrade was undertaken with the same courteous attitude.

My findings convinced me that if I ever needed to upgrade my genlock, and if Rendale made it, then I would probably buy from them. Their aftercare is not only second to none but also vastly in advance of my general experience of dealing with other suppliers.

I must emphasise that my only connection with Rendale is that of a highly-impressed customer who owns a three-year-old 8802 genlock.

John W. Hateley
Dunstable, Bedsfordshire

I am glad that someone has been getting some satisfaction from their genlock, and good service from their supplier too. Wouldn't it be nice if every Amiga supplier could be recommended so highly? ***Gary***



Use the "change drive type" screen to read the configuration for blocks per track and heads/surfaces.

PC Format

Progm
Software

I am using PCTask (v2) on my Amiga as a way of linking my Psion 3 palmtop. I have successfully created a hard disk partition (DH5:) for PCTask to use as drive C: and installed MSDOS6 on it. The link software works fine but the icon name on the Workbench screen turned from DH5: to DH5:+ garbage characters.

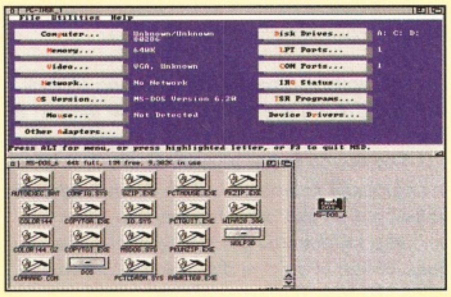
I am now trying to set up a CrossDOS device so that AmigaDOS can also access the partition and hence the files from the Psion. Following the instructions supplied with PCTask and using the information supplied by PCTask and SysInfo, I have created a DOSDriver file called PH0:.

This seems to mount OK, but I cannot access PH0: because I keep getting system error requestors informing me that this is not a DOS device. What am I doing wrong?

Niall Hallett
Slough, Berkshire

It's fun playing with multiple filesystems on the same hard drive isn't it? The garbage after the name is understandable, because the Amiga really doesn't know what to make of the HD5: partition. It has no way of reading it at all, and merely tolerates it.

My system also has PCTask on it set up to use a partition of a hard drive as drive C: – it's the only sensible way to use PCTask, in my opinion. You can see from the shot of HDToolbox (see pic above left) that I make sure that the drive is not selected as bootable. This seems to keep the DH5: icon from ever appearing on the Workbench.



As you can see, the PCTask hard drive is now readable from AmigaDOS.

Now for the other problem. I use a similar Seagate hard drive (an ST3145A), and have discovered that SysInfo can get a lot of the drive geometry values wrong. Always use the HDToolBox program to get the start and low cylinder values, and then use the "change drive type" screen to read the configuration for blocks per track and heads/surfaces.

Use these in your mountlist and try again. This is exactly what I did five minutes ago and as you can see, my PCTask hard drive is now readable from AmigaDOS. (See pics.)

Here are some tips:

- *Check you have the CrossDOSFileSystem installed properly and that you can read and write to PC format floppies.*
- *Check with HDToolBox (not SysInfo) that you have the right drive settings in your special PCTask mountlist.*
- *Try a different name: sometimes if the drive name ends in a number other than a letter such a "C" there are problems. My drive is called PPC: as far as the Amiga is concerned.*
- *Make sure that you are using two different names: my drive partition is called HDPC0: but the AmigaDOS mountlist is called PPC:.*
- *Quoting from the manual: if the parameters given for Heads times BlocksPerTrack do not equal BlocksPerCylinder, assume the Heads value is one and the BlocksPerTrack is the same as BlocksPerCylinder.*

If you still can't get the drive to mount, the only thing I can suggest is an upgrade to version 3, because that is the version of PCTask I am using. ***John***

It's all Greek to me

Video

Hello to all Amiganauts! Today (7th February 1996) a purchase which I had made from England arrived – my new ProGrab 24 with the PCMCIA interface to go with my Amiga 1200.

The problem is that I don't know what kind of cable I need to connect my video (which is VHS, not S-VHS, but I don't think this really matters), or to my 14-inch PAL Sony TV with SCART output, or my 8mm camcorder, to the ProGrab's input.

I have tried it with a cable which I had been using for copying video tapes from one video to another by connecting the source video and audio outputs to the recorder video and audio inputs.

I used the same cable with the digitiser by connecting one end of the cable to the video out and the other end to the digitiser, but the software tells me that there is No Video Signal.

What is happening? Am I using the wrong cable? Am I connecting the cable to the wrong input of the digitiser (it has two and I don't really know which I should be using).

I also bought a SCART cable which I connected from my Sony TV to my digitiser (to the same input as I tried above), but the software still tells me that there's no video signal present. I have tried connecting the digitiser to both the parallel and PCMCIA sockets on my Amiga, but I still get the same

results – that is, nothing! I intend to use my Amiga with a Blizzard 1230IV (8Mb RAM) professionally for graphics.

Menis Malaxianakis
Greece

The most likely cause of your problem, since you do not say which video connector you are using to output the signal from your camcorder, VCR or TV, is that you are attempting to use an RF signal (the one that comes either out of your VCR or camcorder's aerial-type socket), with your ProGrab. This will not work, since it isn't the kind of video signal the ProGrab is expecting.

What you need to use is either a composite video signal (aka CVBS or FBAS in certain parts of Europe) connected to the Phono socket on the ProGrab, or an S-VHS one (using a special S-VHS cable to connect from your camcorder's S-VHS output) connected to the ProGrab's S-VHS (four-hole) socket. Note that it is unlikely that your TV will have a video output at all, unless it is a professional-style monitor, rather than TV.

I would advise you to buy an S-VHS cable (if you haven't already got one) and connect one end to your camcorder's output and the other to the ProGrab's S-VHS input.

Make sure the camera is running, with the lens cap off, or with a tape playing back, if you want to test the ProGrab. Check that you can see an image in the camera's viewfinder, then try to grab it using your ProGrab. The software will automatically sense which input the video signal is connected to, so there's no need for you to change any software settings here.

If this doesn't work, try connecting a composite output from your VCR to the ProGrab's phono socket (the one with just one hole in it). You may either need a SCART to phono cable, or some other cable depending on the video (not RF) output from your VCR.

If both the above suggestions fail to work, see if you can find a friend with an Amiga 1200 and try the ProGrab on their machine, just in case there is actually a hardware problem with your Amiga itself.

If none of my suggestions work (and they should, if all the hardware is working correctly), check your cables again, and, if they are OK, you might well find that you have a faulty ProGrab, which you will need to return to your supplier for replacement.

If you need to contact Gordon Harwoods (makers of the ProGrab) for more assistance you can E-mail them at gharwood@eworld.com. Good luck! ***Gary***

RTTY? No problem



Regarding the query from Monsieur Breut (AS60) and the reception of RTTY transmissions. One can certainly use the Amiga for RTTY. It requires a TNC (Terminal Node Controller) and one firm in England who specialises in digital transmission and reception equipment is Sistim Electronics Ltd, Unit 1A, Hampton Lane, Blackfield, Southampton SO45 1WE. I hope this is of some help.

Reg Holland

Our readers come to the rescue again! Many thanks for helping us out! John

The sample facts



I am looking at recording samples into my A1200 from a tape recorder and direct from a "line out" on an amplifier. I am using Technosound Turbo 2. I noticed that my computer hasn't got an audio input. Do I need to buy some hardware? Is it possible to do what I want it to do, and if so how and what do I need?

Divo (an enthusiastic beginner)

First the good news: yes it is entirely possible to achieve what you want to do with your A1200. Unfortunately, as you noticed, the Amiga doesn't have any "audio in" facilities as standard. You will need to buy a sampling cartridge which costs about £20.

It wasn't so long ago that everybody was advertising samplers, but at the moment they are surprisingly difficult to find. In fact, Datel (☎ 01782 744707) are the only company I know about. However, many dealers may still have some buried in a store room somewhere, so it's worth asking. Alternatively, ask around for a secondhand unit or look up Aminet where there are plans for DIY versions. ***John*** ■

Fill in and get answers to your questions AS62

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Send your form and question to: Amiga Answers, Amiga Shopper, 30 Monmouth Street, Bath, Avon BA1 2BW.

Name: ______________________

Address: ______________________

____

______________________ **Post code** ______________________

Your machine:

☐ **A500** ☐ **A500 Plus** ☐ **A600** ☐ **A1000**
☐ **A1200** ☐ **A1500** ☐ **A2000** ☐ **A3000**
☐ **A4000**

Approximate age of machine: ______________________

Kickstart version (displayed at the "insert Workbench" prompt)

☐ **1.2** ☐ **1.3** ☐ **2.x** ☐ **3.x**

Workbench revision (written on the Workbench disk)

☐ **1.2** ☐ **1.3** ☐ **1.3.2** ☐ **2.04/2.05**
☐ **2.1** ☐ **3.0**

PCB revision (if known). Do not take your machine apart just to look for this! ______________________

Total memory fitted (see AVAIL in Shell for Workbench 1.3) ______

Chip memory available (see AVAIL in Shell) ______________________

Agnus chip (if known) ______________________

Extra drive #1 (3.5in/5.25in) as DF : Manufacturer ______________

Extra drive #2 (3.5in/5.25in) as DF : Manufacturer ______________

Hard disk: ______________ **Mb as DH** ______________ **:**

Manufacturer ______________

Extra RAM fitted – type, size in Mb and manufacturer ______________

Please indicate details of any other hardware which could help us to answer your question:

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Now, use this space to describe your problem, including as much relevant information as possible. Please continue on a separate sheet if necessary.

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HiSoft BASIC2

In the second part of his HiSoft BASIC 2 tutorial **Paul Overaa** *explains the use of tag lists.*

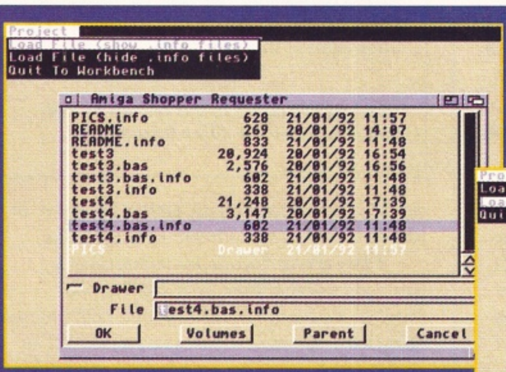
Last month's installment should have convinced you that the mechanics of using Amiga library functions from HiSoft BASIC 2 are not particularly difficult. Before we can discuss gadget use and event handling, however, there is one subject that needs to be put to rest. It concerns the way parameters are passed to some library functions.

In order to provide the enhancements that arrived with OS Release 2, the functions used to perform many established operations, like window opening, needed additional parameters to be specified. One possibility, namely the extending of many existing system structures, would have been an easy solution; but the next time OS enhancements were made the same problem would arise. Some structures would doubtless need to be modified again. In the end, Commodore wisely opted for a more long-term solution based on the use of arrays that contain self-identifying parameter values. Since these lists provide a way of tagging additional parameters on to existing OS structures, they were called tag lists.

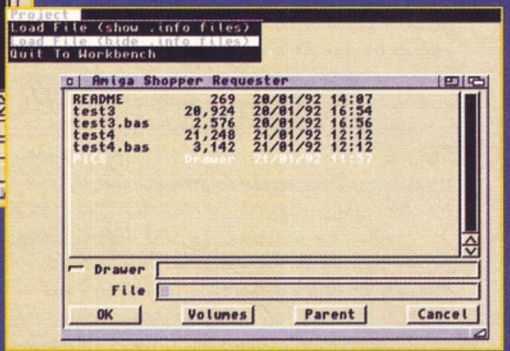
Tag lists

Tag list entries consist of a pair of long word (i.e. four byte) values. The first long word provides a 32-bit identity field, the second a corresponding 32-bit data value. Most tag identities are library specific and their definitions tend to be found in the .bc constants files of the appropriate library. For example, one asl library tag is called ASLFR_TitleText&, and this enables you to specify the title text that is used when an asl file requester appears.

A few general tag item values have also been defined and can be found in the utility.bc file. There's only one you need to worry about and that's a tag called TAG_END& – this signals the end of an array and needs to be placed at the end of any tag list you prepare. To use this definition you need to include the utility.bc constants file (or the utility.bh header file which, as explained last month, would bring in the constants file automatically). If you look in the HiSoft utility.bc file you will see that this has a value of zero; programmers often terminate tag lists with an explicit 0& to avoid having to include the utility.bc or .utility.bh files.



Left: The asl requester showing .info files.
Below: The same directory being viewed, but this time the asl requester is set up to hide .info files.



Jargon buster

Long word: 32-bit, i.e. four byte, value. Basic long word variables and constants are designated by appending an & to the end of the name, e.g. some_value, & 50&
OS: Operating System
Parameter: Any value expected by, or passed to, a function or subprogram
Pointer: Long word variable holding the address of another object in memory

The best way to come to terms with tag lists is to see them being used and, in preparation for this month's discussions, I made use of one tag list-based function call in the second (test2.bas) example of the last tutorial. Now it's time to both explain in detail what was going on and extend the ideas a little bit.

If you look back at the code you will see that asl requester use followed this type of scenario. First an AllocAslRequest&() function call was used to allocate the main data structure for the requester. The program was then able to bring up the requester by calling an AslRequest&() function as many times as was necessary, and this function was tied to a 'Load File' menu option. Before the program terminated a FreeAslRequest() function was used to hand back all the resources allocated by the original AllocAslRequest&() call. The original call to allocate the file requester structure looked like:

```
g_file_request_p&=AllocAslRequest&(ASL_FileRequest
&,VARPTR(requester_tags&(0)))
```

The more adventurous of you will have noted from the function box outs provided that the second parameter was a pointer to a tag list.

The easiest way to prepare a tag list with HiSoft BASIC 2 is first to use a DIM statement to allocate a long word array. I arbitrarily set up space for six pairs of tags by using this statement:

```
DIM requester_tags&(12)
```

To get a set of tag entries into this array, HiSoft BASIC 2 provides a TAGLIST instruction. This requires a pointer to the array that is used to hold the tag list along with the tag pairs themselves.

The address of the array can be obtained using BASIC's VARPTR() function on the first element of the array, `VARPTR(requester_tags&(0))`, in the above example.

The pair of tag items used last month consisted of a ASLFR_TitleText& tag identity and an "Amiga Shopper Requester" text string. With the TAG_END& label being used to terminate the entries, tag list creation looked like this:

```
TAGLIST VARPTR(requester_tags&(0)), _
    ASLFR_TitleText&,"Amiga Shopper Requester", _
    TAG_END&
```

Notice how HiSoft BASIC's underscore '_' continuation character at the end of each line enables the various sections of this statement to be written on separate lines. This is important since it helps keep longer tag lists readable.

If this is the first time you have come across these ideas, you might think that fiddling around building tag lists is a pain. But you must persevere with it. Tag lists have been adopted to solve the problem of adding additional parameters to function calls once and for all; from Release 2 onwards they have become an integral part of the Amiga's programming environment. If you are interested in getting into up-to-date Amiga programming you MUST understand how they work!

Now the good news

First, once you know how to build one tag list; you will be able to build ANY tag list. Second,

once you are using a tag list-based function call you can make many changes simply by modifying the tag entries. Let me convince you that this is true by explaining about some of the tags available in the HiSoft asl.bc file.

For example, the tags `ASLFR_InitialLeftEdge&`, `ASLFR_InitialTopEdge&`, `ASLFR_InitialWidth&` and `ASLFR_InitialHeight&` enable you to specify the position and size of the asl file requester window. `ASLFR_DrawersOnly&` is another useful tag. Setting this tag to `TRUE&` causes the file requester to have no file gadget and to display only directory names in the file list. You can use this tag if you want to have the user select a destination directory for a particular task.

Another useful item is the `ASLFR_RejectIcons&` tag. When this is set to `TRUE&`, this tag prevents .info files (icons) from being displayed in the requester. You should use this tag in all your software because Workbench users should never have to see .info files.

Suppose that we wanted to make an asl file requester appear at top left screen location (50,50), be 400 pixels wide, and have a height of 200 pixels. We would set up these tags:

```
ASLFR_InitialLeftEdge&, 50&
ASLFR_InitialTopEdge&, 50&
ASLFR_InitialWidth&, 400&
ASLFR_InitialHeight&, 200&
```

In other words the TAGLIST statement needed would look something like this:

```
TAGLIST VARPTR(requester_tags&(0)), _
        ASLFR_TitleText&,"Amiga Shopper
Requester", _
   ASLFR_InitialLeftEdge&, 50&, _
        ASLFR_InitialTopEdge&, 50&, _
        ASLFR_InitialWidth&, 400&, _
        ASLFR_InitialHeight&, 200&, _
        TAG_END&
```

In practice, it's not always advisable to throw loads of 'magic numbers' into your code – it is better to define constant values near the start of the program. If, for instance, the file requester was to be the same size as the window being used we could define these constants:

```
CONST W_X&=50
CONST W_Y&=50
CONST W_WIDTH&=400
CONST W_HEIGHT&=200
```

A word of warning

One of the reasons that BASIC coding is great fun is that you can use variables without declaring or initialising them. Past that stage? Well, most people think that but don't you believe it – everyone inadvertently does it occasionally simply by making the odd typing slip. With tag lists this is fatal; let me explain why by looking at this tag entry:

```
ASLFR_InitalLeftEdge&, W_X&
```

What's the problem? It doesn't work because there is an 'i' missing in the tag identity name. We should have written:

```
ASLFR_InitialLeftEdge&, W_X&
```

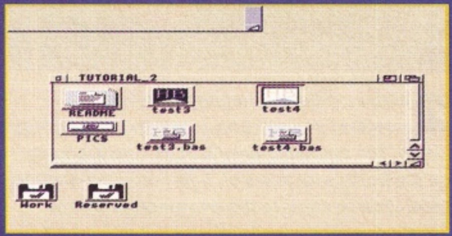
OK, so it's an easy mistake to make when typing tag identities and an easy mistake to miss as well. The interesting thing is that when a tag list containing a misspelt identity is used it, and all subsequent tags in the list, stop working. What happens of course is that BASIC regards the identity item as a variable and then initialises it to zero (in true BASIC fashion). Now you ought to know what happens next – the library function using the tag list encounters this zero identity value and interprets the entry as the end of the list. All subsequent tag pairs therefore get ignored. I've mentioned this because if you find tag entries don't seem to be having any effect during your HiSoft BASIC 2 tag list experiments, look very carefully at the entries you prepared to make sure you haven't slipped up.

Both WINDOW OPEN and TAGLIST statements could then use these symbolic values. For instance:

```
TAGLIST VARPTR(requester_tags&(0)), _
                    ASLFR_TitleText&,"Amiga
Shopper Requester", _
   ASLFR_InitialLeftEdge&, W_X&, _
        ASLFR_InitialTopEdge&, W_Y&, _
        ASLFR_InitialWidth&, W_WIDTH&, _
        ASLFR_InitialHeight&, W_HEIGHT&, _
        TAG_END&
```

I have done this with the first example on this month's Coverdisk (test3.bas). (See page 12 for details of the disks.)

The code is based on the test2.bas example from last month and the significant point to bear in mind is that the only real changes that have had to be made is the inclusion of the additional tags shown above.



***Above:** The new menu options used in the test4.bas example program.*

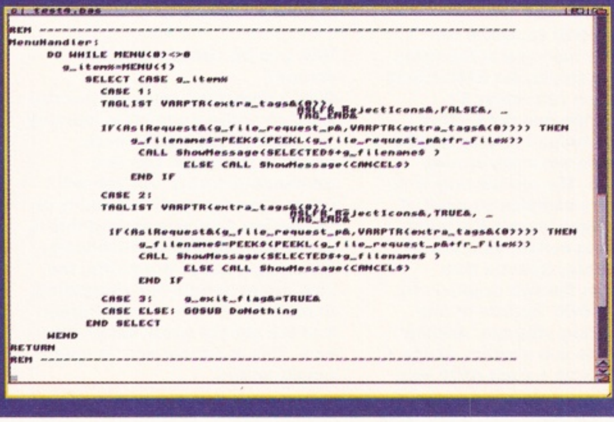
A second example

A file requester's initial position and size characteristics are normally specified just once when the AllocAslRequest&() function is used. However, the AslRequest&() function used to bring up the requester can also accept tag parameters (see last month's tutorial for function details).

For the second example I have tied AslRequest&() calls to separate menu items and incorporated additional tag lists that make use of the `ASFR_RejectIcons&` tag. In one case the tag value supplied is `FALSE&` (so .info files are not shown), and in the other case the same tag is set to `TRUE&` so that .info files are displayed (you'll find this example code on disk as the program test4.bas). For the extra tag data I've specified an array using `DIM extra_tags&(4)`; but instead of initialising this array at the start of the program, it is done within the case statements which handle the menu operations.

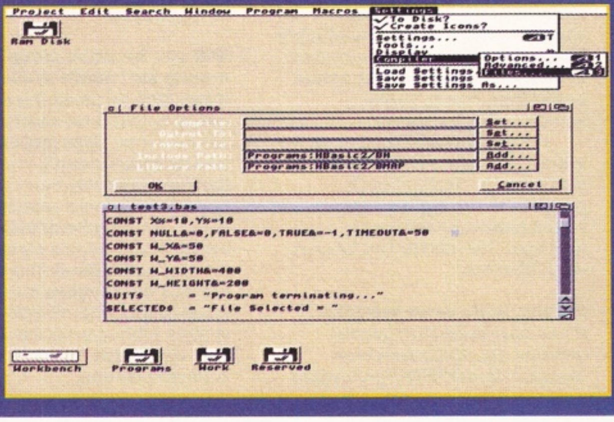
Make the most of the fact that much of the code will be familiar from last month's tutorial and concentrate on the small changes associated with this month's tag list discussions. From now on I will assume that you understand the use of tag lists. Both of the examples on the disk, incidentally, are again using HiSoft BASIC's conventional high-level menu/close-gadget event handling.

Unfortunately, this approach has inherent limitations and so next month I will explain what they are and how to avoid them. ■



***Left:** The modified case statements code from the test4.bas program.*

***Right:** Don't forget to set appropriate include and library paths before compiling the examples.*



Amiga music

In part three of our music tutorial, **John Kennedy** *discusses the power of sound sampling on the Amiga.*

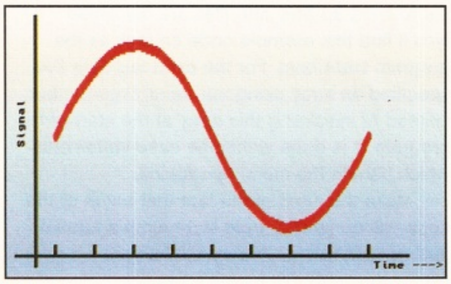
"Sampling is so **popular** because it is so powerful."

Sound on the Amiga is produced using sound samples: real sounds replayed at different pitches. Samples are extremely useful throughout modern music, because they are extremely flexible.

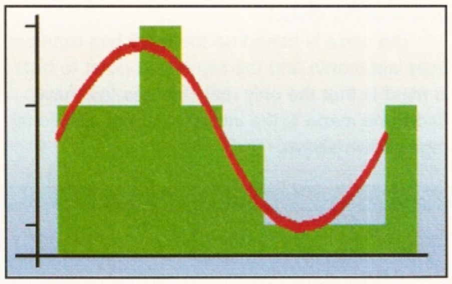
On the one hand, samples form the basic building-block of almost all modern synthesizers, which use a "wave table" of sampled sounds and then process them to create realistic sounds. On the other hand, dedicated samples can store drum kits, vocals and media snatches, and replay them exactly like the original, or processed in some way. Samplers are also used as digital tape recorders: capturing sounds to hard disk for editing, processing and mastering.

Sampling is so popular because it is so powerful. Converting an analogue sound source into digital data means it can be processed, stored and replayed with excellent quality. The music stored on a CD is digital, and it sounds much better than analogue vinyl records or analogue compact cassettes ever do.

The process of converting the sound into digital format (which is often called "sampling" or "digitising") and vice versa is carried out by electronic chips. There are two quantities which determine the quality of an audio sample. The first is the sample rate, the second is the resolution.



1 ***This is the original waveform. It varies smoothly with no steps. This is the waveform we will sample.***



2 ***With only three sampling levels, the resultant sample (the green shape) is pretty rough. The sampling level is high (the markers on the horizontal access), but there isn't enough resolution to capture the waveform properly.***

Quality of sound

Taking the resolution first, it soon becomes obvious that the more detail you use to store the sample, the better it will sound. You can see this if I quickly change into some flared trousers, put on a kipper tie, grow a strange beard and adopt my best Open University lecturer-type voice. (See pics 1 to 4.)

You can see that the resolution is important, and that's why CD players have 16 bits of resolution: that's up to 65,536 different levels to measure the sample. The Amiga has 8-bit resolution, but even that means 256 levels, so the sound quality is pretty good.

Making the most of Amiga sampling

The Amiga's built-in sampling hardware may be only four channels with a resolution of eight bits, but it stills sounds excellent. In fact, it can occasionally sound better than cheap, 16-bit soundcards used on PCs.

However, there still comes a time when the quality simply isn't enough. Sadly, it isn't possible to unplug the Amiga's sound hardware and slot in a new card. The Amiga just doesn't work like that.

Do you really need sampling?

If you only need high quality instruments, it is possible to buy an external MIDI synthesizer for a lot less than an external MIDI sampler.

Will you be using sampling mostly for "media snatches"?

If you plan on using the sample replay function for short bursts of voice from films and so on (ahem, cough, cough, copyright), then you probably don't actually need 16-bit stereo sampling. If you sample from radio or non-NICAM TV then the Amiga's eight bits will do very well indeed. You can process the samples for echo, phasing and filter effects with a sample editing program and then play them back for very expensive-sounding results.

Do you need many samples replayed at once?

Dedicated MIDI samplers can replay many samples at the same time. For example, the EMU ESi32 which we use can replay 32 samples at the one time – this makes the Amiga looks decidedly weedy. There are ways around this, though. The easiest way is to fabricate the samples yourself: if you are always (or mostly) going to be playing certain samples at the same time, create a new sample from the two originals by using the "MIX" feature of any sample editing program. Another solution is to use another Amiga – you can pick up a used A500 very cheaply these days, and hey presto! another four voices.

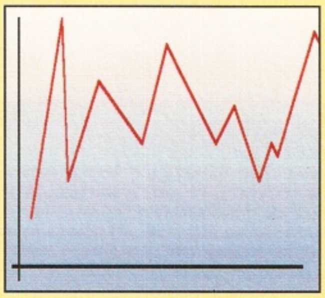
Will you be using sampled drums?

With a dedicated sampler, you can keep an entire drum kit in memory at one time and trigger each sound individually. This is a tremendous luxury, but you will rarely have the same capability on the Amiga. One way around this is not to sample drums individually, but sample entire drum riffs: the kick, snare hi-hats and everything. Sample the entire riff and trigger it at the start of every bar or four bars. This is a great way to create Jungle music!

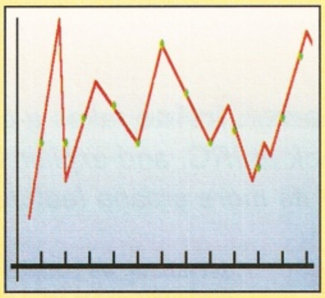
Why sample rates are important

It is important to pick a sample rate which is fast enough to capture all the detail in a sound. The sample rate of choice is defined by the "Shannon-Hartley Sampling Thereom" as twice the highest frequency in the sound. This is also known as the Niquest Rate. If you sample at less than this rate, detail will be lost as you can see from this example below.

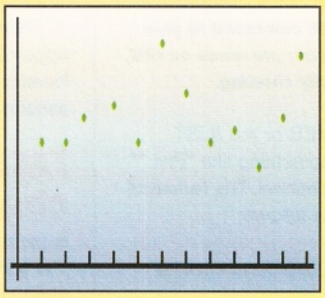
***Step 1:* Here is the original audio signal. It's not digitised yet, so like any analogue signal, it varies over time: there are no steps. It's the sort of signal you would see if you connected a microphone to an oscilloscope and watched the waveform bounce up and down.**



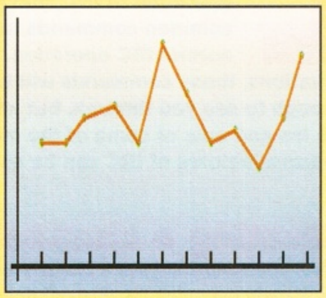
***Step 2:* Now we digitise it at a sampling rate defined by the marks along the horizontal axis. For each marker, we put a dot at the closest point to the original signal. We can only space the dots horizontally at the rate of the markers on the axis. (We are not dealing with resolution here).**

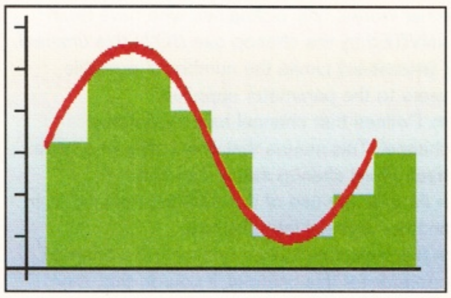


***Step 3:* Now we can remove the original waveform and leave the samples behind. These are the only pieces of data we store, because we know that each sample is a "snapshot" of what level the original waveform was at for each point in time (or at least each point in time separated by the sample rate).**

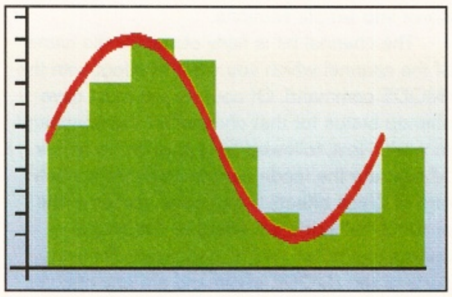


***Step 4:* To replay the sample, we re-create the original waveform. The only way we can do this is to make use of the samples we have. You can see that at the start of the waveform where there is a lot of movement, our sample rate wasn't enough to capture all the detail.**





***3** Double the resolution and things start to get better. Only a little, mind you. Deciding which level to put the green bar to is difficult when you don't have much to choose from.*



***4** With increased resolution the sample starts to get closer. With a high enough resolution and a fast enough sample rate, the sample would look pretty close to the original.*

> "A single **sample** can therefore be made to play an entire tune."

Tunes, please

We have explained how a sample can be made and replayed, but how is it possible to play back samples at different pitches? It's all very well sampling a piano playing Middle C, but do you need to sample all the other notes as well in order to be able to play a tune?

Thankfully not: the trick is to replay the Middle C sample at different rates. Play it slightly faster and it goes up in pitch, play it slower and it drops in pitch. A single sample can therefore be made to play an entire tune. You can see this yourself easily with an Amiga tracker program such as OctaMED. The Amiga keyboard is used as a music keyboard, and depending on which key you press, the sample is replayed at different rates and therefore different notes are created.

You might be thinking that since the samples are played at different rates, the samples would all last different lengths of time. The higher-pitched samples would sound for a lot shorter than the lower-pitched samples. Also, after taking so much time to get the sampling rate right, won't playing it a lot slower (to get a deep, low-pitched sound) effect the quality?

The answer is, of course, yes on both counts. Higher-pitched samples don't last as long and very low-pitched samples can sound rather ropy. A dedicated MIDI sampler gets around this problem because it can automatically loop each sample. Every sound has an attack, a sustain and a decay to a certain extent. With careful editing you can loop the sustain and so extend the sound. The MIDI sampler hardware can keep the loop happening for as long as the keyboard is pressed down, which makes a big difference. (MIDI samplers can do all sorts of other tricks such as adjusting the amplitude, pan, tuning and filtering as well – but that's what you pay your £1,000 plus for).

The best way to get around the sample length/quality problem is to create multiple samples. Obviously, it would be best to sample each note individually: and so have 48 or 49 separate samples for a four octave keyboard. In practice you can usually get away with one sample per octave, and use the altered replay rate trick to create the extra notes. ■

Next month

In next month's music tutorial we will look more in-depth at sample analysis, and some of the software and hardware tools; which will help you make the most of them on your Amiga. Stay tuned!

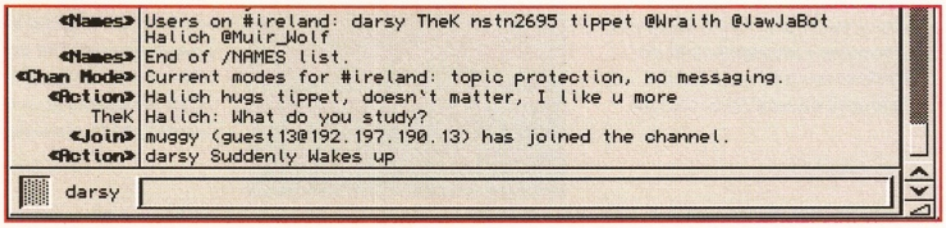
IRC features

Darren Irvine *takes a closer look at IRC, and explains some of its more arcane features.*

Last month, we covered the basic principles behind the operation of IRC, and looked at common commands used in normal IRC operation. In most situations, those commands will be enough to see you through, but knowing the ins and outs of some of the more obscure features of IRC can be useful.

Creating a channel

When someone first joins a brand new channel, that person becomes the channel operator or "chanop" of that channel. This person has the power to affect the way in which that channel is perceived by other IRC users, and can also make other people chanops for that channel. The command which does most of the work in terms of changing the status of a channel is the /MODE command. One of the most significant things that can be done to a channel is to use /MODE to make the channel "private", rather than the default "public" mode. As we've seen, anyone can see who is on a public channel and anyone can join that channel. Private channels on the other hand, can't be joined by just anyone, and normal users can't obtain information regarding the people on a private channel – use of the /NAMES or the /LIST command usually returns something like "Prv: *" when examining a private channel. The format of the /MODE command is as follows:



***Above:** You can use the /ME command to give some feel of animation to your presence on IRC, rather than sticking to simply chatting.*

/MODE [channel] [+|-][modecontrols] [parameters]

This looks a bit complex, but it can be broken down into simple sections.

The channel bit is fairly obviously the name of the channel which you want to affect with the /MODE command. Of course, you must have chanop status for that channel for the command to work. Next, followed by a plus "+" or minus "-" sign are the mode control characters, each one of which affects a particular aspect of the channel. "+" adds the effect of that mode control character, and "-" cancels it. The last parts of the /MODE command are any optional parameters which are needed for some of the control characters.

Note that the channel name must be in uppercase, and the mode characters in lowercase. The valid control characters and their associated parameters are listed below.

/MODE control characters

b [person] Bans [person] from this channel. The [person] parameter must usually be in nickname!user@host format for the "b" control character to work.
i Sets the status of the channel to invite-only. In other words, only nicknames who have been /INVITEd by the chanop can /JOIN this channel.
l [number] Limits the number of possible users to the parameter supplied.
m Defines that channel as a moderated channel. This means that only users who have been given chanop status can talk.
n Forbids the use of the /MSG command from another channel into this one.
o [nickname] Makes [nickname] a channel operator for this channel. If you do this, then leave the channel, the newly-created chanop can ban you from your own channel.

More than just a chat system

Although IRC was designed as a method of communication between Internet users, it's been expanded into a more versatile system using what is known as the Client To Client Protocol (CTCP). This system enables two users who's IRC clients both support CTCP to perform client-specific actions across the IRC network, such as transferring files.

The main /CTCP command itself can be used to find out various information about the client software being used by an IRC user, and the general format of its operation is as follows:

/CTCP [nickname] [command]

The commands that can be used with /CTCP are:

VERSION: Displays information about the version and release numbers of the IRC client being used by [nickname].
FINGER: Displays information relating to the amount of time [nickname] has been idle on IRC and which server is being used.
CLIENTINFO: Used without a nickname to return information on the CTCP commands that are supported by your particular IRC client software. Use it with a nickname to see if the person you want to communicate with also has software which supports the command that you want to use.

Although new CTCP commands are being developed all the time, the most commonly used one is the /DCC or Direct Client Connection command which is used for file transfers. One word of warning; never send or receive a file from someone unless you know exactly what file is being transferred – it is possible for unscrupulous IRC users to gain control of, or damage, your local system by sending bogus password files, or getting you unwittingly to send your own.

The options available for the /DCC command are:

/DCC SEND [nickname] [filename]
Initiates a file transfer procedure between your machine and that belonging to [nickname] – in the first instance [nickname] will be informed that you want to transfer the file. It is up to the remote user to continue the transfer using the next /DCC command:
/DCC GET [nickname] [filename]
Accepts the file transfer which was initiated by the remote user's /DCC SEND command.
/DCC LIST
Shows the current DCC connections with details of their types, status and the nicknames involved.
/DCC CLOSE [type] [nickname] [arguments]
Aborts an unwanted DCC file transfer request. The arguments should be the same details as shown using the /DCC LIST command for that DCC connection.
/DCC CHAT
Establishes a direct client-to-client chat which, unlike normal IRC communications which pass through any number of IRC servers, enables secure communication directly between two users. Once the /DCC CHAT connection is established, the secure messages are sent using the normal IRC /MSG command.

p Defines the channel as private.
s Defines the channel as secret. Secret channels are an extension of private ones, and can't be seen at all using a /LIST or /NAMES command.
t Defines the channel to be "Topic Limited". In other words, only chanops can change the channels' topic. This is the default on most IRC servers anyway.

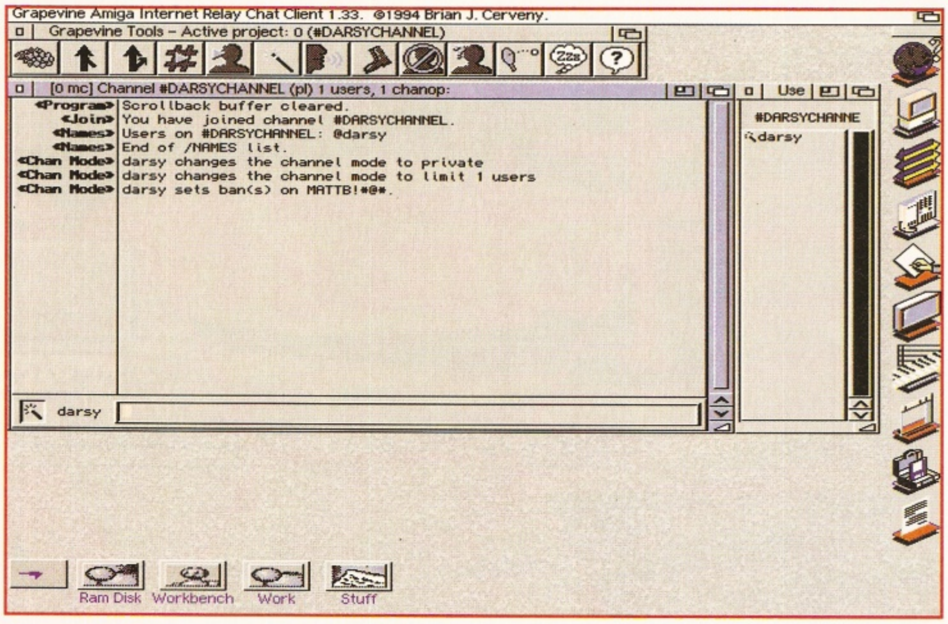
Using the /MODE command

/JOIN #mychannel Join my rather egotistically-named channel.
/MODE #mychannel +p Make the channel private – so I can be in my own little world.
/MODE #mychannel +l 1 Just to make sure I won't be bothered, I'll limit the number of users on my channel to 1. Normally, you will want to consider a higher limit than this. Unless you like talking to yourself.

Advanced IRC commands

Once you start using IRC a lot, you'll need to know some of the more exotic commands, so you can appear to know what you are doing. This is important if you have created your own channel to be a chanop on, or have been granted chanop status on an existing channel.

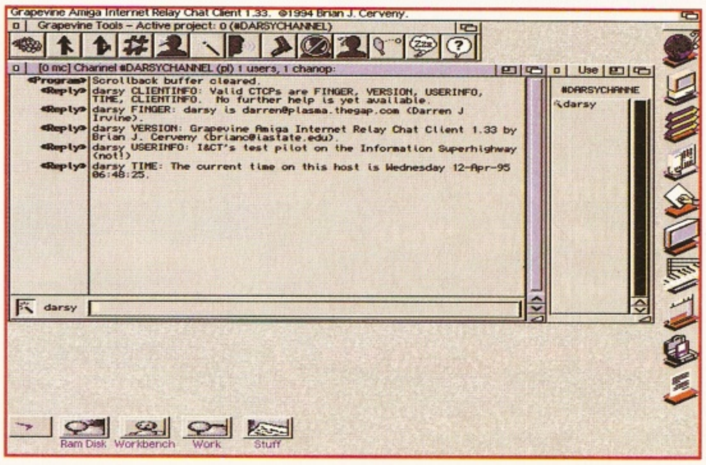
/AWAY [reason] This command marks you as being away from your terminal, without ending your IRC session. You can use this command when you want to pop to the loo or go and make a cup of coffee, or pour a beer, without actually logging off the channels you are on.
/IGNORE [nickname]|[user@address] [type] Sometimes you will wish to not see messages from a particular nickname or address, and the /IGNORE command is the one to use. The type parameter specifies which types of IRC message to ignore – MSG, NOTICE, PUBLIC, INVITE, ALL, or NONE. If you precede one of these with a minus sign, you will stop ignoring that type of message from the specified nickname or user. Using the /IGNORE command on its own with no parameters lists who you are currently ignoring. For example:



Above: ***Using the /MODE command to configure my newly-created channel.***

/IGNORE jimbob ALL Ignores all messages from the user with the nickname "jimbob"
/IGNORE *@dumbass.oxy.edu This will ignore any "INVITE" messages from any user using the server dumbass.oxy.edu.
/INVITE [nickname] [channel]
Sends an "INVITE" message to the specified nickname to join the specified channel. If no channel is given, the current channel is used. This command is handy if you want to speak to someone on IRC, but you don't know which channel they are on – you can simply ask them to join your current channel.
/KICK [channel] [nickname]
Kicks the specified nickname of the specified channel. You can use this if someone is behaving in an abusive or otherwise unacceptable manner. Note that unreasonable use of the /KICK command will get you a bad name on IRC, and it's probably a good idea to leave any /KICKing that has to be done to experienced IRC users – in other words let someone else do the dirty work. Plus, you will only be able to kick someone from a channel if you have chanop status.
/ME [description] Produces a description type message on the screens of everyone on the current channel. For example, if your nickname is "Fred" and you type the command: "/ME falls off his chair laughing", the other users will be treated to a message like: * Fred falls off his chair laughing.
/NICK [nickname]
Changes your currently-used nickname to whatever you like. If you do this too often other users will think that you have a bit of an identity problem – in general the rule is to pick a nickname and stick with it every time you use IRC. The only usual reason for a change of nickname is when two users with the same one try to use IRC at the same time – whoever is first on will be allowed to use the name.
/NOTICE [nickname],[channel] [text]
Works in a similar way to "/MSG" but puts "-" characters around your nickname as it appears on the recipient's screen. Many automated IRC processes (known as "Bots" which will be covered later on in this series) use /NOTICE, so it is probably best to stick to using /MSG unless you want to give the impression that you are nothing more than a program.
/NOTIFY [nickname],,
Adds the specified nickname(s) to a list of names who you'll be warned about when they start or stop using IRC. Including too many names in this list can slow things down, both for you and other users using the same server. Unless you are really looking out for someone, it's best to avoid using /NOTIFY.
/QUERY [nickname],[channel]
Starts a private conversation with the supplied nickname on the optionally-specified channel. To cancel this private mode, use /QUERY with no parameters. In effect, using /QUERY is like issuing a series of /MSG commands. Be aware however that no conversation, even protected by /QUERY, is secure on IRC. Any unscrupulous operator on any IRC server anywhere on the Internet can eavesdrop on any messages, so be careful what you say.
/TOPIC [channel] [topic]
Changes the channel topic for the specified channel, as seen when using the /LIST command. In general, you'll need chanop status to be able to change the topic. ■

Below: ***The results displayed when using the available CTCP commands with Grapevine.***





Above: ***In Grapevine's Userlist window, users with Channel Operator status appear with a little wand beside their nicks.***



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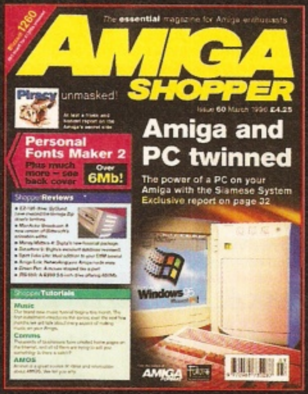
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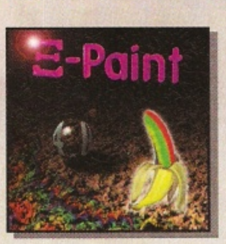


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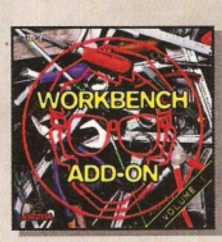
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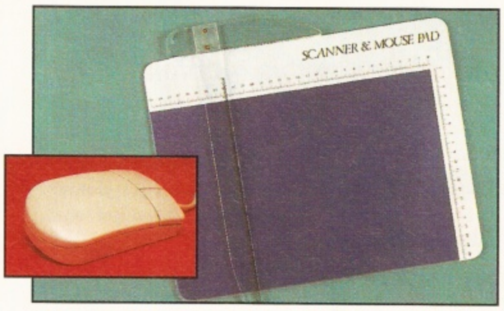
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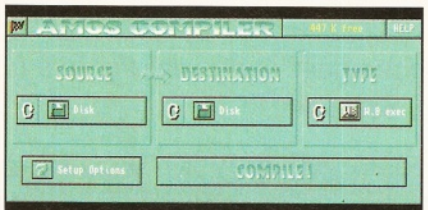
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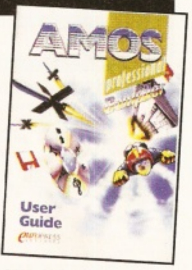


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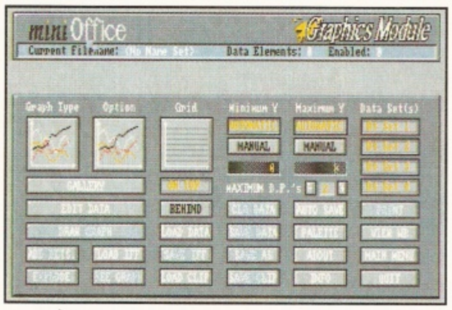




AMOS Pro Compiler 2

Speed up your AMOS programming with the AMOS Pro Compiler 2 from Europress, which F1 Licenceware have re-released for a limited period. If you want to know more about the program, we ran a review of it in the April 1996 issue, where we gave it a respectable 87 per cent.

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Domain Choice

David Taylor *tunes into PD-FM once again and picks the hits from the misses in this month's selection of toptastic Public Domain software.*

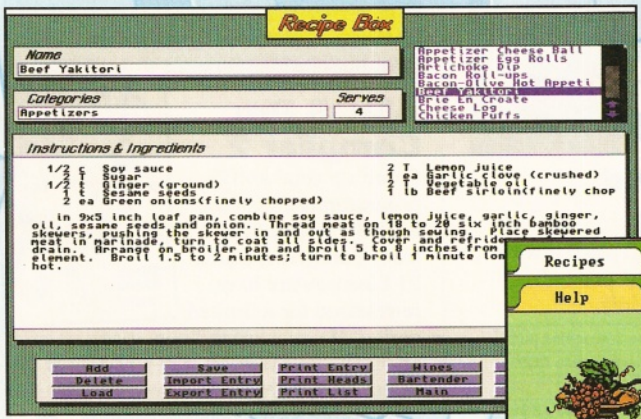
There has been a rather odd development in the way magazines treat PD recently. It seems that a number of our rivals don't seem to think that there is enough stuff to review. We're somewhat bewildered by this, because we have more than enough. So while everyone else cuts their coverage, you can rely on us to keep bringing you as many PD reviews as we can possibly cram in.

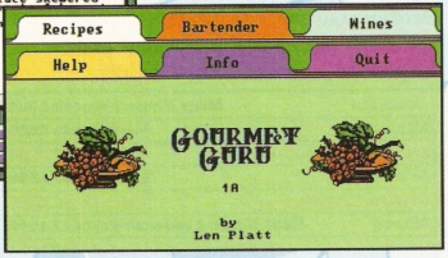
Gourmet And Wine Steward

This disk comes from the Lifestyles series which provides programs that are not computer orientated. It's refreshing to find packages that use the Amiga for something other than just plain old WP/DTP/DTV, etc. Essentially, the two programs on here are specialised databases, but although they are custom created for the purpose, they are not simply files running through a database program.

Gourmet is a demo and has three areas. The first is a recipe database, which has some good ideas for entertaining, but is a bit limited. The second is a bartender area that has the recipes for cocktails. I tried to convince Sue that for a thorough review we should try making each and every one to check the authenticity of the mixes, but she remained unconvinced. The other part is a section for keeping track of your own wines that you have in stock. For this to be of use, you've got to have an extensive cellar.

Wine Steward might be titled second, but it is the more intriguing of the two programs. Moving through menus and submenus, you can select a course and an actual dish and Wine Steward will then select the wine that it thinks best accompanies your meal. The downside is that the database of dishes is not exhaustive; it gives you a fair selection, but there's no real section for main courses. Still, it's a pretty good starting place if you need ideas about integrating food and drink.





Leisureware rears its head with two culinary programs: Gourmet And Wine Steward.

Verdict: 80%

Who, what, where, when, why, how...

Product	No of disks	Type of product	Price*	Supplier	Contact	Verdict	Page
Gourmet And Wine Steward	one	Applications	90p + 50p	Roberta Smith DTP	0181 455 1626	80%	68
Liars	two	Demo	£1.50 + 75p	Online PD	01704 834335	90%	69
ShapeShifter 3.2a	one	Application	75p + 75p	Online PD	01704 834335	95%	69
Magic Selector	one	Utility	£1.50	Kew=II	0181 657 1617	90%	69
Final Wrapper 3.11	one	Utility	75p + 75p	Online PD	01704 834335	92%	70
TurboCAT-Pro 2	one	Application	75p + 75p	Online PD	01704 834335	90%	70
Chaos Pro	619K	Application	n/a	aminet/gfx/fract,	ChaosPro.lha	95%	71
X-Password 6	one	Utility	80p	Saddletramps PD	01709 888127	20%	71
VMM 3.3	one	Utility	£1.50	Kew=II	0181 657 1617	95%	72
Roswell Crash Slides 2	two	Slideshow	£1.50 + 75p	Online PD	01704 834335	20%	72
Ultimate Memory Tools	one	Utilities	75p + 75p	Online PD	01704 834335	60%	73
Flummy Utils 5	one	Utilities	75p + 75p	Online PD	01704 834335	75%	73
OctaMED Technique	one	Educational	£5.50	See PD directory	n/a	70%	75
AGASSM 7.22	one	Application	£2.95	5D Licenceware	01709 888127	95%	75
Tell The Time	one	Educational	£3.99 + 50p	F1 Licenceware	01392 493580	75%	75
Paint, Paste And Draw	one	Application	£3.50	Horizon@Seasoft	01903 850378	96%	75

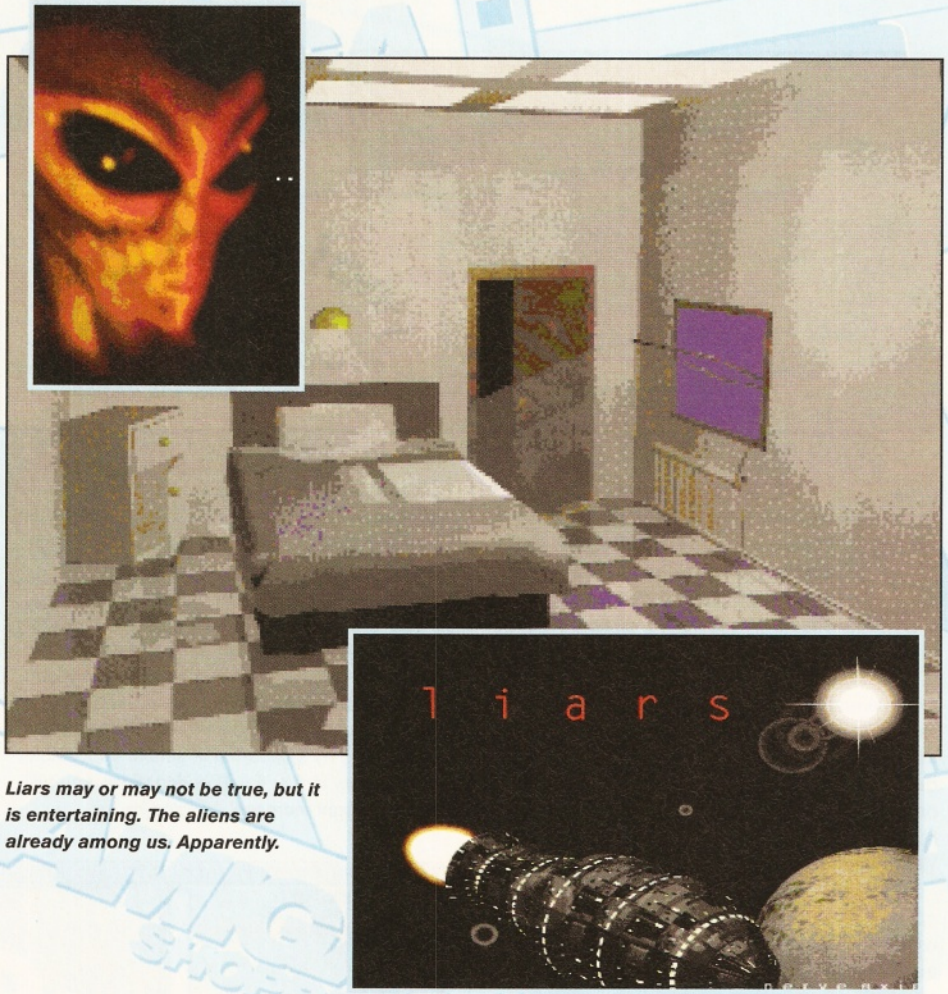
Some prices listed here include postage and packing charges; buying more than one disk from a PD house is likely to reduce the price per disk; check compatibility of the program with the PD House before purchasing. More information on all the PD Houses and their prices can be found in the PD Directory on the Coverdisks.

Liars

Is this a slideshow, education, fiction or a demo? The truth is out there. This two-disk set fades in sets of high quality pictures and text that explain the US Government's cover up of alien contact. Apparently, Eisenhower met up with aliens who needed humans to keep their race alive. In exchange for advanced technology for the Americans, he promised to keep the aliens' visits secret. The plot thickens from here on and I'll not explain it all. I'm not sure how seriously you're supposed to take all this, but it does make compelling viewing. When it's all over, it finishes off with a small demo sequence of swirling and spinning effects that have absolutely nothing to do with the rest of the title. Some of the demo part might not be exactly inspired, but the burning plasma is still nice.

I'd say that of all the slideshows, diskmags and demos about aliens that we've seen recently, this is one of the best. It might not be crammed with text or pictures, but it's not reliant on the Roswell film for footage and although it's really no more than rolling demo, it is fascinating. A must for sci-fi and UFO fans, although it may fall short of the mark for fanatics.

Verdict: 90% **Star buy**



Liars may or may not be true, but it is entertaining. The aliens are already among us. Apparently.

ShapeShifter 3.2a

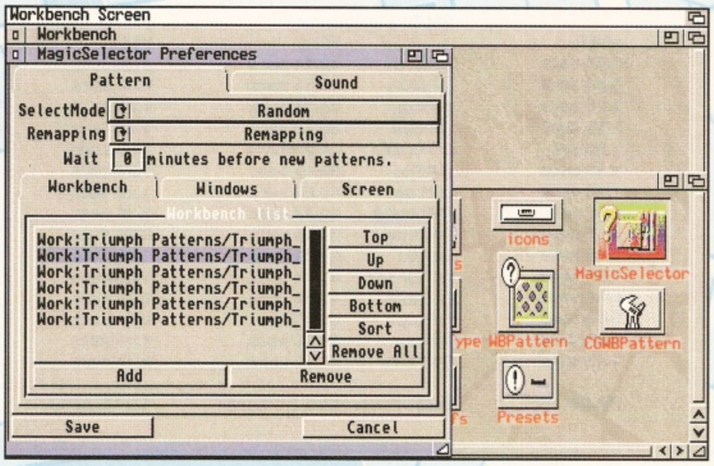
This program is still causing waves and, as we reported last month, has been more than just noticed by Amiga Technologies. It is an Apple Macintosh emulator for the Amiga. It is completely software driven and relies on software versions of the Mac's ROMs that you take from a real Mac yourself. For legal reasons, you must own the Mac too. Because the Amiga runs on the same processor family as the Mac, the speed of emulation is astonishing. This is no gimmicky program; you can use it for serious work. It means that if you own an expensive Amiga set up, but want or need to run Mac software, you can just get a cheap, secondhand Mac and then use the Amiga and all its power and peripherals as a faster Mac.

This is a Shareware package and has a very cheap registration fee of only DM50 (approx. £30). Because of its Shareware status, the author is constantly updating and improving the program (sometimes dramatically), which means that a version you get from a PD House can soon be superseded. Indeed, this version has already been supplanted by 3.4, although I expect that if you order it you will get the latest available version. These newer versions are always worth keeping up to date with. For the sake of the cost of a PD disk, don't make do with an earlier version, because essential parts like the PrepareEmul command and the speed of the emulator have been improved, as well as additional support being added.

The unregistered version of ShapeShifter 3.2a has a few of the options disabled, but it is still perfectly usable for you to try it out in real operation. If you want to use it, then register, because the Amiga must have continued development for this program.

If you want to know more about how ShapeShifter works and how it is installed for use, check out this month's DIY feature on page 28, which has a section covering the program.

Verdict: 95% **Star buy**



New backdrops and sounds for your Workbench that change every time you boot up.

Magic Selector

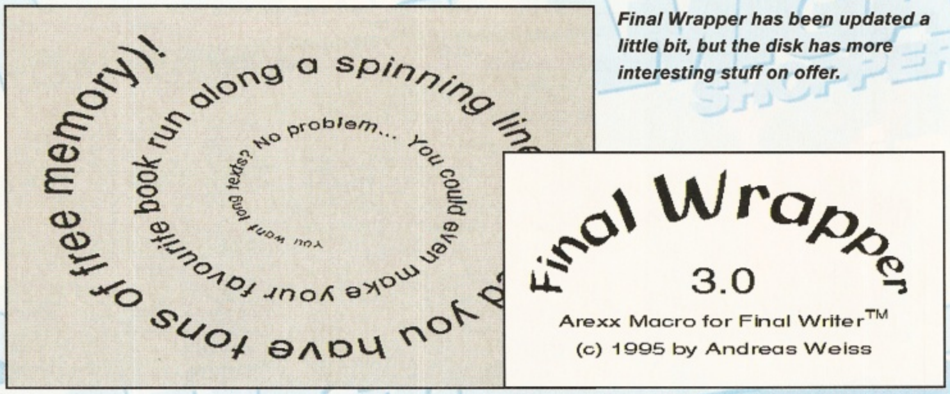
It appears that several programmers have noticed how poor the original WBPattern preferences are. Forget the fact that it only uses IFFs, but consider that it doesn't actually put the backdrop pattern up correctly. An update called CGWBPattern has been included on this month's Subscribers disk, which has datatype support and a random option.

Magic Selector takes a slightly different slant . It consists of programs for the WBStartup drawer and a preferences interface that enables you to choose a set of backdrops to be picked at random, or in order; it also has a set of samples for the system to use for things like alerts – do something wrong and a crowd might show its amazement. The package requires WB3, MUI and, realistically, a hard drive.

The disk also has a small selection of patterns and samples archived on there by the author to start you off. It might not be the most exciting utility ever, but it's easy to use, well programmed and it brightens up your Amiga in a customisable fashion.

Verdict: 90% **Star buy**

▶ 70



Final Wrapper has been updated a little bit, but the disk has more interesting stuff on offer.

Final Wrapper 3.11

This disk contains three programs. The main one is Final Wrapper, an excellent selection of macros for use with Final Writer to create text effects. We included version 3.1 on the Coverdisks of AS56 and this version is only 0.01 on from that. It offers little more of interest if you already have our disk – just one small bug fix and an additional catalog. If you don't have our disk, but you do have Final Writer, either this disk or that back issue are a must-have. The new features this gives you are what led Larry Hickmott to say; "Quite simply, anyone with Final Writer should get their hands on Final Wrapper".

However, also on this disk is a patch to speed up FW4 by up to 400 per cent for users with 030 Turbocards. If you've got one, then the author claims that the speed increases are excellent, which makes it a pretty interesting disk, I would have thought.

Lastly, packed away as an Lha archive in the FW patch directory, I found an archive that I have seen before, but I have not had the time to play with. It's by the same author as the patch and it contains a set of updated maths libraries that replace the original Workbench ones for people with FPUs or 040 and above processors (there are two versions). So, if you've got an A1200 with accelerator and FPU, or just a memory board with FPU, you can get an even better performance; and A4000 owners are in for a real treat.

There are some benchmark test programs supplied and using them as guides, the results are amazing. So amazing in fact that I've reproduced them (see box below). I accept that I have an 060 processor, but the difference in times on this same processor using the new libraries is staggering. Of course, it's a big difference between the author's benchmark programs and real usage. I tried to find a program that uses the libraries intensively, and after an afternoon's testing, concluded that these libraries are used so briefly by programs that testing by stopwatch is almost impossible. All I can say is that if you concentrate, you will notice a slight increase. Judging by the benchmarks, anything that does use them intensively should be really moved up a gear.

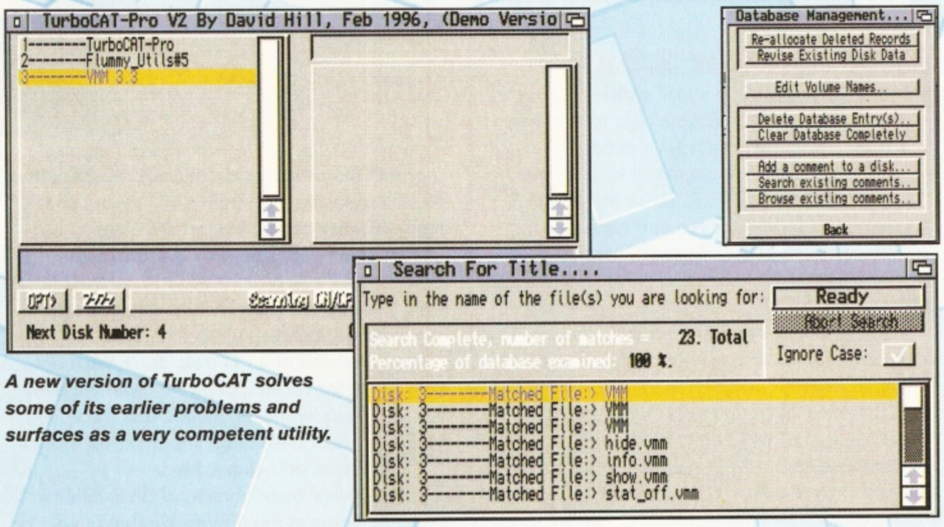
The libraries have so far proved stable, but I have kept a backup of the original libraries in case any problems arise and would strongly advise everyone to do the same.

I get the feeling that this archive just found its own way on to this disk, because it's not mentioned anywhere. In fact, the disk feels a little sloppy. The Installer is left totally unpacked, when it almost always supplied crunched to save space. A ReadMe file is missing, which will really annoy the author (rightly so). However, the three programs that are on here are useful, which means that even though it could be better, it's still a good disk.

Verdict: 92% **Star buy**

TurboCAT-Pro 2

It's back again! Dave Hill, the author, is obviously determined to develop this program so that everybody likes it. The last version was reviewed in issue AS59, but there have been a number of changes since then. TurboCat is a disk cataloguer and can manage a number of databases (restricted to two in the PD version)



A new version of TurboCAT solves some of its earlier problems and surfaces as a very competent utility.

Fast maths replacement libraries test results

mathieeesingtrans.library
250000 iterations

	v37.1	v40.6
SPAcos	23.21 secs	1.01 secs
SPAsin	24.11 secs	1.42 secs
SPAtan	30.58 secs	1.16 secs
SPCos	30.58 secs	1.45 secs
SPCosh	34.24 secs	1.63 secs
SPExp	29.87 secs	1.24 secs
SPLog	30.19 secs	1.29 secs
SPLog10	31.69 secs	1.37 secs
SPPow	2.27 secs	1.23 secs
SPSin	29.99 secs	1.50 secs
SPSincos	34.19 secs	1.77 secs
SPSinh	36.49 secs	0.79 secs
SPSqrt	0.47 secs	0.47 secs
SPTan	28.59 secs	1.84 secs
SPTanh	37.97 secs	1.77 secs
Total time:	**404.53 secs**	**20.03 secs**

mathtrans.library
250000 iterations

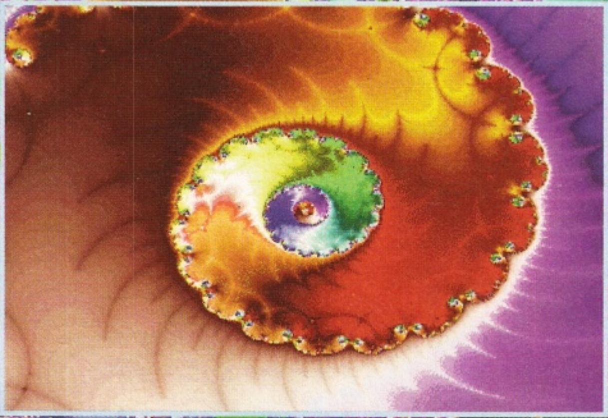
	v37.1	v40.6
SPAcos	6.20 secs	1.08 secs
SPAsin	6.50 secs	1.56 secs
SPAtan	2.45 secs	1.25 secs
SPCos	2.13 secs	1.55 secs
SPCosh	5.21 secs	1.69 secs
SPExp	4.12 secs	1.35 secs
SPLog	1.66 secs	1.38 secs
SPLog10	2.51 secs	1.51 secs
SPPow	2.08 secs	2.62 secs
SPSin	2.13 secs	1.59 secs
SPSincos	2.47 secs	1.97 secs
SPSinh	36.49 secs	0.88 secs
SPSqrt	1.19 secs	0.58 secs
SPTan	3.21 secs	1.94 secs
SPTanh	5.55 secs	1.82 secs
Total time:	**53.05 secs**	**22.85 secs**

mathieeedoubtrans.library
250000 iterations

	v37.1	v40.6
DPAcos	42.14 secs	1.28 secs
DPAsin	40.50 secs	0.93 secs
DPAtan	35.85 secs	1.00 secs
DPCos	38.15 secs	1.28 secs
DPCosh	41.80 secs	1.66 secs
DPExp	37.39 secs	1.23 secs
DPLog	40.66 secs	1.28 secs
DPLog10	42.37 secs	1.38 secs
DPPow	74.45 secs	2.64 secs
DPSin	38.21 secs	1.28 secs
DPSincos	40.74 secs	1.60 secs
DPSinh	42.26 secs	0.79 secs
DPSqrt	0.52 secs	0.52 secs
DPTan	34.28 secs	1.44 secs
DPTanh	43.42 secs	0.77 secs
Total time:	**592.82 secs**	**19.16 secs**

Internet Choice

Aminet has been offline for most of this month and is only just back up, so I'm just going to deal with one program here. As luck would have it, subscribers can find Chaos Pro on their Subscribers disk this month. If you're not a subscriber, the details for downloading can be found in the box on page 68.



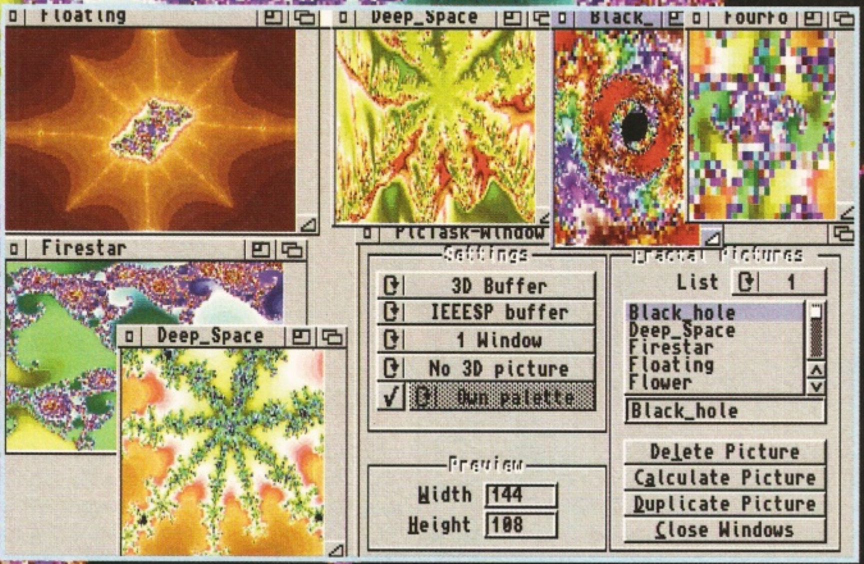
Chaos Pro

There is still something very alluring about fractals, and although there are quite a few fractal generators on the Amiga, none have offered the level of competence of Chaos Pro. This is not a new package, but we haven't featured it before because it had a few problems. This new version is now much faster; although you might consider it slow when using it, but remember just how complex the calculations required are. It requires a minimum of WB2, an 020 processor and an FPU and really needs a hard drive, but the results are quite special. I had it using virtual memory for the bigger pieces; I also found that after installing it and using the faster maths libraries that I discussed in the review of the Final Writer disk this month, the whole program still seemed to run faster after I had run the external preferences program and allowed it to generate its files. Odd, but who's to argue? Maybe it's me going mad, but I'd recommend you do it anyway.

OK, so fractals are not exactly useful, but I think that you will find the results worth the effort and there are so many options that you can't help but get involved.

Verdict: 95% Star buy





of your floppy disks. A number of enhancements have been made, including a cleaner interface and a couple of additions that I had (polish my halo) suggested. The program now scans below root level into directories and has support for an external drive. It can also ignore the system directories so that your database doesn't become cluttered with things such as multiple scans of C directories.

The program can also automatically scan and add the contents of Lha and Lzx archives. The former worked fine, but I had problems with Lzx (I suspect that is down to our special, licensed version of Lzx). I still get the slight problem with the program trying to rescan disks straight after scanning it; although this is easy to cancel, it's a bug that needs rectifying.

Still, I think that this is my favourite cataloguer and if the bug gets sorted then it would happily notch up a few more percentage points. Anyone who looks at the program will see CanDo in the credits, so if you are looking for the level of competence that this month's Coverdisk can attain, here's a pointer.

Verdict: 90% Star buy

X-Password 6

It is with a heavy heart that I'm writing this review. With PD, you often find that there are parts that can be improved, but that there is something good at the heart of the program. But X-Password has nothing to recommend it. The author has produced a lot of other utilities, some of which show promise, but quantity does not equate to quality. It is better to produce one polished program than 10 useless ones.

In the hope that it will be useful, I will list the flaws of X-Password. It does not work as it should for a start; icon tools are set incorrectly. When you do get into the interface, the text has been displayed with a bad choice of colours that makes it hard to read. The password chosen must be eight letters. You end up installing the X-Password program manually and in such a small utility, its 40K size is unacceptable. The real problem though is that circumventing the password is too easy. Either remove the X-Password line from the StartUp-Sequence or read the data file stored in S:, which tells you the username and password.

You need adequate knowledge of the Amiga to install the program and yet anybody, certainly a child, can remove it. In comparison to the sophisticated Enigma II system, reviewed in AS60 and included on the Coverdisks of AS61, which actually makes a disk or partition non-DOS until a password is entered, X-Password

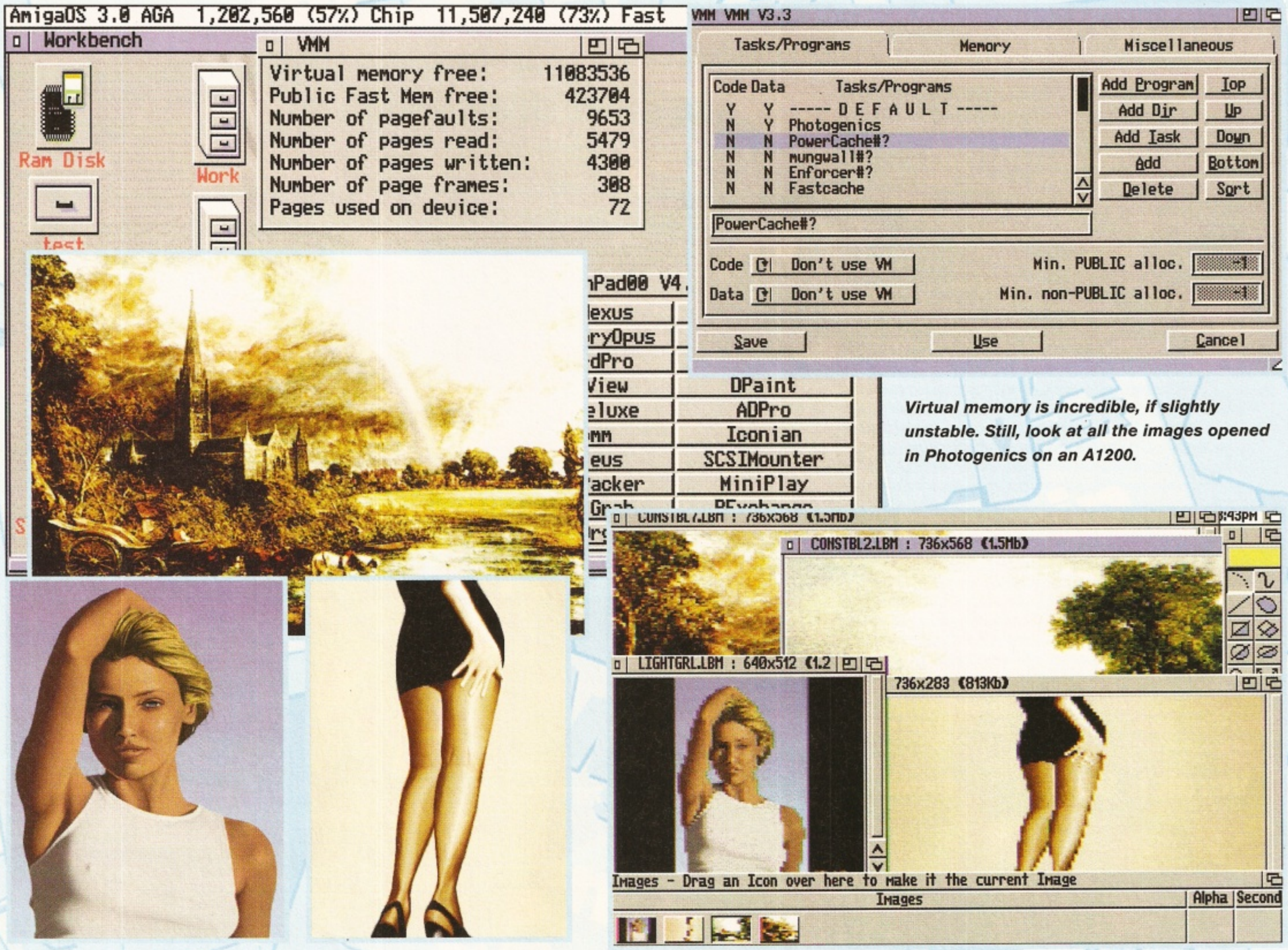
▶ 73

PD submissions

If you have some exciting PD disks that you would like to be considered for review in Domain Choice, send them in to Amiga Shopper, Future Publishing, 30 Monmouth Street, Bath BA1 2BW, clearly marked as a PD submission. We welcome any type of disk, except games.

If you are a PD house, make sure you include all the information necessary, such as how to contact you, how much the disks cost and how people can pay. If you are the author of the program, state where people can get your program from, and whether you would like us to consider it for inclusion on a future ShopperChoice Coverdisk.

Information about new PD houses or PD authors is accepted for inclusion in the PD directory (see box on page 73 for further details).



Virtual memory is incredible, if slightly unstable. Still, look at all the images opened in Photogenics on an A1200.

looks very silly indeed. Why is a program so lacking in its sixth version? Earlier versions, and possibly this one too, should never have been released and without a complete change there is no reason for V.7, because it is so outclassed by others. Abandon this and concentrate on one powerful program.

Verdict: 20%

VMM 3.3

Virtual memory. It's like memory for free really, isn't it? You've only got a 4Mb SIMM on your A1200 accelerator, but you want to be able to use 12Mb of RAM. VMM is the answer. You need MUI, a hard drive, an 030 processor and a maths co-processor, but then you are away. The most amazing thing is it actually works. Well, most of the time.

Virtual memory works by using a handler that makes the Amiga believe that a section of the hard drive or a file on a hard drive is actually an extension of RAM. Of course, when a program uses virtual memory, it works a lot slower than real RAM because it has to access your hard drive.

This sort of memory cannot be a replacement for as much proper RAM as you can afford, but it is an amazing supplement that enables you to work on projects larger than you would normally be able to from time to time. So, for 3D renderings and graphics, it's essential.

The last version refused to work with an 060 processor (not that there are that many people with one yet), which caused me some grief. However, one of the improvements with this version was supposed to be 060 support. After four hours of trying every permutation and sitting through a lovely B500 0835 guru every five minutes, I was beginning to think that perhaps it didn't work with 060s after all. In a final attempt, I decided to adjust the partition it uses for the virtual memory and suddenly it worked. It crashed again when I overloaded it, but apart from that seemed to work fine.

There are one or two bug fixes from the last version, but several important fixes since version 3, so do upgrade if you haven't had this program for a while. If you use and keep VMM, don't forget the Shareware fee, which is only $20 (approx. £15). Pretty cheap for 10Mb of memory. Or 50Mb. Or 100Mb. Or 500Mb!

Verdict: 95% **Star buy**

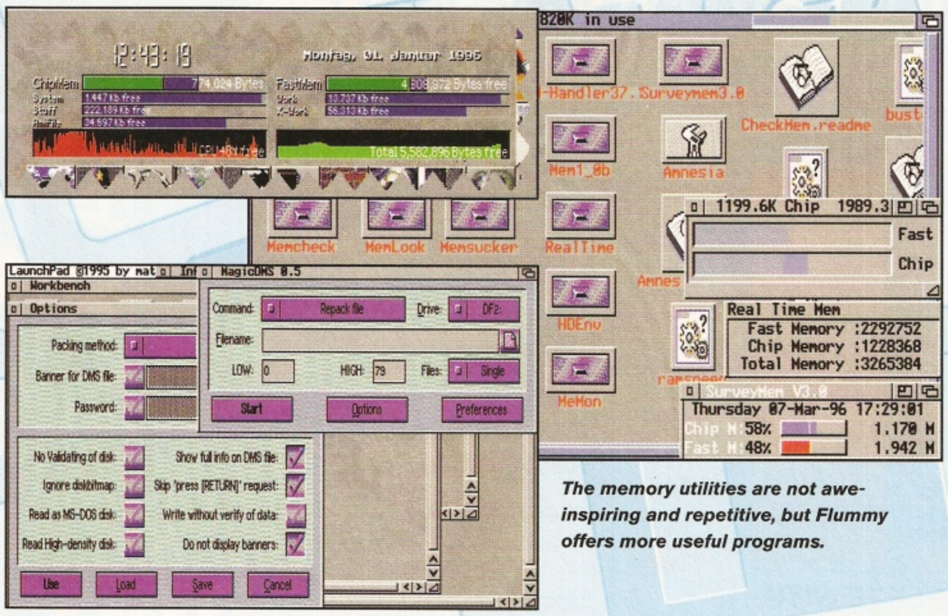
Roswell Crash Slides 2

Oh, the aliens are coming to get me! Oh, stop them! The aliens are coming to get me! I'm scared... Blah, blah, blah. Stop it! Please, stop it! I can't stand another slideshow of the Roswell incident. I'm beginning to believe that this is a secret US Government plot to bore us all so much with tedious photographs that we simply don't care if aliens are annually holidaying in the Algarve wearing G-string bikinis, never mind just visiting Earth.

What adds insult to injury with this slideshow (apart from the fact that the pictures have mostly been seen elsewhere), is that the whole thing runs from a simple and slow GIF viewer that runs from a Shell script, and that they have tried to disguise this fact and make it look like there's more to it than there actually is. This is a poor quality slideshow that could have had everything fitted on to one



Oh, a clay head, how convincing! Please stop sending in Roswell slideshows.



The memory utilities are not awe-inspiring and repetitive, but Flummy offers more useful programs.

disk by using a different file format and which shouldn't have been dumped on us in the first place.

Verdict: 20%

Ultimate Memory Tools

Ah, the idea of Essentials disks and Ultimate compilations. Wish I'd thought of that. Anyway, this disk purports to contain all the memory-related utilities that you might want. The snag being that, while it has a couple of good programs on there, it falls a long way short of containing all the programs.

HDEnv is a useful way of gaining some memory back by having your Env: directory based on your hard drive and it can save hundreds of Mbs of RAM if, like me, you have masses of software installed. There are also ones for scanning memory for errors and for mapping out the errors, and ones for letting you actually look at memory or access it directly. There are then masses of memory meters, but that's one of the problems. Why so many? One or two of the best would have been enough to give people a choice. In addition, there are some utterly useless programs, like the one that just sucks memory. In the words of Wayne the Wise. "It certainly does suck."

What is most annoying though, is that this wasted space could have been used constructively. Where is FastECS, the program that remaps the exec.library in RAM? What about LowFrag, the program that improves memory management? The aforementioned VMM could also have been fitted on as an archive and an Installer script written. Or WBExtender which can show more information about what is held in RAM in your WB titlebar and flush unused libraries from RAM.

There are some good programs on here, but too many of them are old and pointless. The good ones have been included on AS Coverdisks in the past, so regular readers wouldn't benefit from this disk at all. Come on, put some effort in. It would be easy to produce a genuinely comprehensive selection of useful memory tools that could help users. Follow the instructions above!

Verdict: 60%

Flummy Utils 5

Unlike the other disks in this series, this one only has two programs on it. The first is a very large package called, ironically, TinyMeter. It's a memory meter which has masses of options and looks pretty neat. The second is a new interface for the Disk Masher System called MagicDMS. This interface looks pretty good. It's large and clear and has lots of options, including the ability to de-archive to RAD.

This is supposed to be a beta release, which detracts from the disk's attraction, but anyone looking for a memory gauge may be better going for this disk rather than the memory utilities one because at least you get another useful program. ■

Verdict: 75%

The PD directory

On the disk

You will notice references to the PD Directory in the "Who, what, when, where etc" boxout on page 68. This directory used to be printed within the magazine, but had to be in very small text because of the amount of information it contained. To solve this, we have updated and recompiled the list and put it on our Coverdisks as a text file in the InformationZone.

The InformationZone contains both the PD Directory and the list of User Groups (which also used to be in the issue). They are both in two formats, AmigaGuide and ASCII. The AmigaGuide enables you to point and click your way to the information, making it much easier to find the details you require. Read the ReadMe file for more information. See page 10 for details.

▶ 75

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Licenceware Choice

For some reason Sue thought that me making a coffee for her was more important than writing this section, just because I haven't made one yet this month. Rest assured, I didn't fold immediately and continued to grumble for hours afterwards and also made sure that it wasn't a very good cup anyway. The one good thing to come out of the whole episode was an ideal way to introduce the selection of superb Licenceware titles that we've got for review this month, and you've just read it.

OctaMED Technique

Last month, we looked at the modules designed for games programmers from the author of this techniques package. Technique comes as an A4 booklet with accompanying examples disk. The booklet covers creating reverb, echo and chorus, using loops and breaks, time stretching, digitising tips and some miscellaneous topics. This package is like an addendum to the OctaMED manual.

While I'm sure that the techniques will be of use to budding musicians, I'm not sure that the text and disk offers enough coverage. What there is is good, but the examples disk is sparse and the manual thin. The price of £5 is a little steep, but I'm sure that some people will find it worthwhile.

Verdict: 70%

AGASSM 7.22

A slideshow creator. Wow. OK, another one of my biased views bites the dust. This is a great little program. It reminds me of the excellent Nucleus, in that it combines power with a really easy to use interface. Essentially, it comes with a creator and a player. You create the project and then distribute it with the player. As standard, the player can deal with IFF pictures and animations and a couple of module types. Doesn't sound too advanced? Well, it also has ARexx support so that should you want to use something that it can't deal with, all you have to do is use a program that does support the format and use ARexx to communicate between the two programs.

If that sounds daunting, then don't worry, because you can still produce some excellent pieces without ARexx. Within the interface is the ability to choose the files and select how they will be shown, whether faded in or shown using a set of special effects (a little like M.M.Experience). The program automatically recognises the file type, so it knows whether to play a module or show a picture. In fact, if you were starting out, you need know little more than how to select a file with a requester. It even supports powerpacked files to save disk space. At the moment, the system requires WB2.1 or above, but the author is trying to fix the system to work on lower machines.

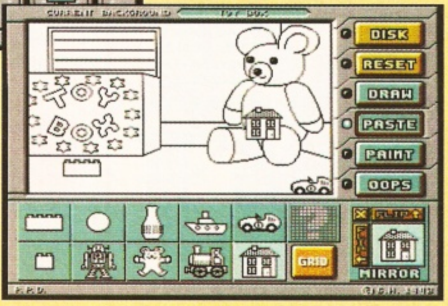
5D Licenceware are showing that some quality software can be released for a price that anybody can afford.

Verdict: 95% Star buy





Another excellent paint package for kids of all ages appears and our editor becomes "otherwise engaged."



Tell the Time

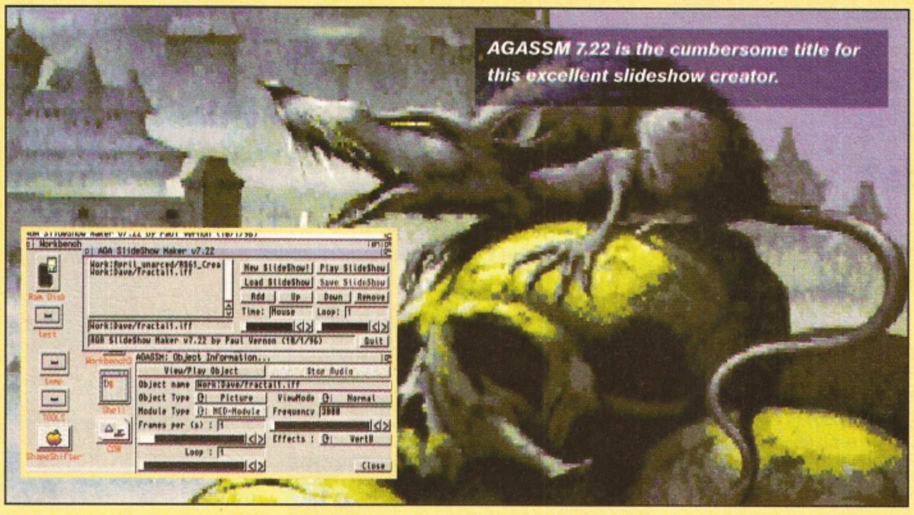
This educational program is a bit of a mixed bag. On the one hand, there are some genuinely useful games that will help children to work out the time. Although some of the graphics are poor, I would have thought that the age range that are learning the time probably won't worry about them, they'll just like being allowed to play on the computer.

However, some areas of Tell The Time are simply games like Breakout, which has some time-related questions tagged on the end; other areas have been badly thought out. One shoot-out type game has a whole screen of text explaining it all before the game. Because the game consists of adding up times and picking the answer from a set of three, I would have thought that any child who can read all of that can also work out that they only need add up the final digits and match that with the one that ends with the right number. Still, there is certainly some good stuff in this program.

Verdict: 75%



Tell The Time suffers in the looks department, but is aimed at the younger audience.



AGASSM 7.22 is the cumbersome title for this excellent slideshow creator.

Paint, Paste And Draw

I have been relegated to writing about this program, because everyone else has kicked me off my computer to play with it. Huh. Paint, Paste And Draw is very similar to Magic Paint Box, the last Licenceware paint package to bring the AS offices to a halt.

Like MPB, this is aimed at children, but it takes a different slant. You are provided with a set of black and white line drawings that you can fill in with colours, which is fun in itself. Then, you can select a set from clipart that relates to the picture – there are several different backgrounds with themes like farmyard, outer space and seaside. When you select a piece of clipart it magically pings on to the screen and you can then colour it in.

There's also a small freehand drawing section for you to design your own backgrounds, or to use to add the final touches to a piece. The whole program is tied together with fun samples and basically what I'm saying is that kids and immature adults (which means most of us) will love this program.

Dirt cheap and in the words of the editor "Fab"! More backgrounds is all we ask. ■

Verdict: 96% Star buy

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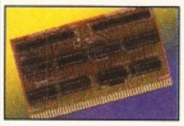
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Talking shop

This month in Talking Shop: changes at AS; C64 emulator; the Amiga overseas; the backlash begins; and our DTP compo prize winner!

The main reason why the Amiga has carried on despite, rather than because of its owners is the loyalty and downright devotion of the people who use the machine. And here is where you have your say – in our letters pages.

What's going on?



£25 Winner

I am writing this letter wanting to know what is going on. I have been buying AS since it first split from Amiga Format way back in May 1991. Up to last year I had not one complaint to make about this sacred mag. But that was a year ago, things change – the weather plays up a little more and things get dearer and slimmer. Now the weather I know you can't influence, but the length of your mag is getting a bit of a joke isn't it? Future publish a lot of magazines and I think that price per page AS is one of the most expensive. Could you please explain to me why items such as PC mags are full of reviews and end up costing less than AS.

Are we the Amiga community having to fork out extra so that the others don't go up? Needless to say that I am a bit unhappy with the situation and I would appreciate your views on this matter. Apart from the high price and the slimness of the magazine, it is still quite a good read. Thank you for listening.

Stuart Hall
London, E-mail

It's a hard fact of life in the publishing world that advertising pays for the production costs of magazines. Copy sales help, of course, but it is mainly down to how many adverts a magazine features every issue that determines its success.

And, if you think about it, the reason why PC magazines have pages and pages of reviews and ads is because the PC market is huge and expanding further every day.

Amigas have only recently returned to the shelves of High Street stores – after a lengthy absence. It will take a while for people to realise that they are back. However, there is plenty of new hardware and software still being produced for the Amiga – just look at all the reviews we have in this issue.

And read our World Of Amiga show guide on page 24; there will be loads more new hardware, software and upgrades launched at the show – the Amiga 1200+ amongst them. Probably.

AT contacts

If you want to contact Amiga Technologies, write to the following addresses:

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More support

I want to congratulate your work with Amiga Shopper, this mag is GREAT!, and your WWW home page is better that the expensive Amiga Format, with more support for us overseas customers, too.

Recently I saw an advert of a software house (Software 2000), who sell an interesting C64 package for the Amiga; and they claim that you reviewed it and scored it 88 per cent. I really want to buy this package, but first I want to ask you, What kind of games it has? I saw screenshots from Spy vs Spy and Hole In One. Can you tell me some more titles?

Rene Soria
Mexico
E-mail



AS on FutureNet: look at page 64.

Thanks for your kind words Rene! The C64 program you are referring to is called C64v3.0 and it is an emulation package from Software 2000. We reviewed the package in the PD section of our October 1995 issue.

This C64v3.0 six-disk set contains the latest release of A64 and 100 C64 games, including Boulderdash, Nemesis, Stellar 7, Monty Mole, Falcon Patrol 2 and Hunchback 2. You are right in saying that we gave it 88 per cent. Hope that helps!

You may also be interested to know that we have included Magic 64, which is another C64 emulator, on the Coverdisks of our April 1996 issue.

If you can't get hold of the latest issue of Amiga Shopper or you want a back issue, call our special Order Hotline on ☎ 01225 822511.

Thanks, AS

Thank you for including my math program Funky 5.2 on your Subscribers disk in the March issue of Amiga Shopper.

I never thought that any computer magazine could be that fast in publishing new software from the Aminet.

It is a very nice gesture to send me a free copy of your magazine as well. Thanks.

Peter Gath
E-mail

You're welcome! Please keep sending your programs in to David Taylor.

I'd just like to say...

I'd just like to say keep up the good work on the magazine; and I'd just like to say that it is an excellent idea to have the 13 issues per year (as opposed to what AP said).

Simon Richards,
A loyal reader since Issue 1
E-mail

Many of you may not realise that we published 13 issues of Amiga Shopper last year; and we intend to produce another 13 this year. Most of the other Future Publishing magazines will be doing the same.

Do you think this is a good idea? Would you buy 13 issues of your favourite Amiga magazine too? Write in and let us know.

Serious power

I read Amiga Shopper very often since it is the only serious Amiga magazine for power users. It is a

pity that two or three Greek magazines are interested in Amiga but only for its gaming abilities and only one (PIXEL), has pages for serious users. The other mags ignore the existence of the best computer ever made, although it has a strong professional presence in the local and national TV stations; ANT1 and MEGA – the two most popular private Greek TV stations – use A4000s.

MEGA used Scala MM300 for the live presentation of the last national elections; while an ARexx script was taking data from the national network without any human interference, an Apple sign was in the bottom of the screen!

The low budget TV stations have remained in the age of ECS chipset, 68000 CPU and Scala 500. This is because there is no advertising, no technical back-up, hardly any people who know Amiga in depth and no reliable service from the official representative. I had to wait three months for my A4000/030 to be repaired, despite the fact I needed it to produce graphics for local TV stations.

In September 1995, Blue Sky TV spent £3,000 on a 90MHz, 16Mb RAM, Stealth VGA card, 4x CD-ROM drive, 2Gb HD, Pentium etc., believing that it can give 15KHz PAL video signal from its video card through a TBC corrector! The result was disastrous because they didn't know that a special and expensive PC video card was needed. But it is a shame that Amiga lost a buyer due to inadequate information – an A4000/060, 18Mb RAM for £3,000 would do the job a million times better, cheaper and easier.

Amiga Technologies must give the Amiga international support and show the power of this computer. A price reduction for the A4000 would help because professional users depend very much on CPU performance and PCs are ahead on this point.

Can overseas readers enter AS competitions?

I think that a column with international, Amiga-related activities and news all over the world is missing from AS. Don't forget that after the closing of Amiga World, AS is the only choice for power users worldwide.

Theodoropoulos Kostas
Athens, Greece

Overseas readers are welcome to enter our competitions – we will lengthen the closing dates as you suggest, so you have plenty of time to get your entries to us.

Your suggestion for an overseas column is a good idea; however, we are a UK magazine. Amiga Shopper is just not big enough to cover all the news from all the different countries we sell copies of the magazine in; which include the US, Australia, Mexico, Ireland, the Netherlands, Belgium, Malaysia, Switzerland... Do you see our dilemma?!

How to contact us

£25 Winner

Write in to Talking Shop, Amiga Shopper's letters pages, and you could win yourself some cash. The Star letter published every month receives £25.

So, put pen to paper and send your letters in to:
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Alternatively, you can E-mail your letters to:
amshopper@cix.compulink.co.uk
sgrant@futurenet.co.uk

All the letters received at these addresses will be considered for publication, unless you specifically advise us otherwise.

The backlash

And so it starts; the somewhat unfortunate but perhaps wholly predictable backlash against Amiga Technologies. I suppose we were all led such a merry dance during the dreadful Commodore years that we cannot control our inbuilt and painful cynicism about the gurus (no pun intended) who are now responsible for the welfare of our chosen machine.

It is all too easy to hunch over our computer and complain bitterly about the mistreatment being dealt out by AT, but could I just beg everyone to stand back, take a deep breath and for god's sake chill out! It ain't that bad.

People were discontent that the Amiga had not been on sale for over a year; there was concern that the new buyer would just pinch the technology and be damned with the home computer market; an upgrade was needed urgently; dirt cheap prices were required; the future path of the technology was in some doubt.

I think it's fair to say that Commodore were at fault over the sale of the company. Typically, they were unable to organise their own funeral effectively because they were too busy trying to screw the biggest buck out of some sucker.

There's no doubt that the UK management buy-out was the most favourable option from a user's perspective – better the devil you know – so when Escom pipped it at the last moment the trepidation was palpable. And yet, Escom/Amiga Technologies have shown a remarkable commitment to the technology.

Let us put ourselves in AT's shoes. Having just spent $10 million on a product everyone thought was dead, what were they to do? AT owned the Amiga, but at the time it comprised a few bits and bobs of hardware scattered around the globe with no guarantee that AT could get their hands on it. So, with a logical eye on the Christmas market, AT resolved to put Amigas back in the shops in time for the Yuletide celebrations. They were in effect starting from scratch, and lo and behold they did it. Even then, grumblings were afoot about pricing, but given that production was ramped up so fast I think we should count our blessings, particularly as the blow was softened by an excellent software bundle.

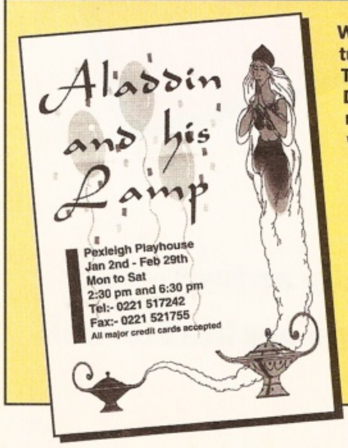
If the term cock-up can be levelled at AT so far, there are only two areas that spring to mind; incompatible floppy disk drives and Scala MM300. The first is forgivable as incompatibility arises only with certain games and AT have made moves to sort out problem machines – the onus is now on AT to ensure that the fixes are made quickly and efficiently.

The second is a bit more thorny. There is no doubt that Scala MM300 is a magnificent piece of software and the option to bundle it couldn't be ignored, but AT really should have foreseen the lack of memory problem with a standard A1200 and made it clear from the outset that the program won't run in 2Mb of memory. This is most definitely a customer service cock up worthy of Commodore, but even so I don't believe it is insurmountable.

Readers may remember that Scala HVT100 (the bottom of the range version for the uninitiated) was given away on a Coverdisk some time ago. I have used it on my A1200 ever since as it is one of the most intuitive and user-friendly programs I have ever seen. OK, so it doesn't exactly stretch the AGA chipset – in fact, it doesn't use it at all – but it does emphasise that the Amiga is the

▶ 81

DTP poster competition results



We ran a competition in our DTP tutorial in issue 59 to design a poster. The prize for the best poster was a DTP program of your choice. We received lots of entries, but there were two that we liked the most.

The poster on the left is from John Ward of Derby and the other is from Anne Weyens from Belgium. We thought both were good enough to show you, but we can only have one winner, who is John Ward. His poster is stylish, atmospheric and does its job very well. Please write in and tell us which of the four DTP programs we offered you want as your prize, John!



AMIGA FORMAT



You may have read a few details about Amiga Technologies new machine, but what does the new Amiga look like? What does it mean for the future of the market? The next issue of *Amiga Format* contains exclusive pictures and comment.

On Sale Thursday, 11th April

PLUS Lightwave 4 has finally arrived – but does the most famous Amiga application still have what it takes?

most friendly tool for this kind of work. Most people who see my home videos gasp in wonder at the professionalism of the titling, even though I only choose from four fonts and work in a maximum of 32 colours.

If, therefore, Scala HVT and MM300 were both bundled with A1200s, then users could get an immediate glimpse of the capabilities of the machine.

Maybe I'm just being naive, or maybe I've just owned my machine too long, but I believe that the Amiga has a strong future, both as a games machine (which is still where the main user base is), and as a home productivity tool that is second to none for ease of use and flexibility. Just wait for the PowerAmiga, it's gonna be a killer!

Jamie Winter
Waterlooville, Hampshire

Your views on Escom and Amiga Technologies' treatment of the Amiga are certainly worthy, if not entirely justified.

Amiga Technologies intended to sell 60,000 Amigas in the UK alone around Christmas 1995 – but, because of various set-backs (including the fact that SDL, the distributors of the Amiga, applied for an Administration Order and were then taken over), they only sold 5,000 new A1200s in the UK. You may be interested in the interview with AT's Gilles Bourdin that we ran last month.

Also, because of "economic reasons", Amiga Technologies GmbH UK moved to the Escom HQ in Stansted and shed most of their UK staff.

Amigas are certainly back in the shops, but they are also in Escom shops where, it is reported by many people wanting to buy them, they appear to be overlooked by the staff in favour of the PCs.

However, on the bright side, the World Of Amiga Show is going ahead as planned, which should help sales of the machine. And there will be plenty of new hardware and software on display there, which will make people realise that AT and Escom are backing our favourite machine. See our show guide on page 24 for more info.

Coding clues

I've followed many of your tutorials on C and Assembly language. However, they did not actually teach people to program. They only guided the user through the specific features of the language.

Whilst this may be necessary to teach the way a language handles the basics of programming, it results in the amateur thinking he can code an application without any design or forethought. This results in poorly written, bug-ridden programs with no hope of ever being updated successfully.

This applies to your recent AMOS tutorials in which the user is supplied with useful routines to use in his or her own programs. This is useful but can hardly be called a tutorial and does not teach the user to program correctly. However, it has to be said AMOS does encourage disastrous programming practices. How this language claims to be of "professional" status is anyone's guess.

Any modern, high-level language which only allows one parameter to be passed back from a procedure, therefore encouraging the use of global variables, and has no support for dynamic data structures without resorting to low-level coding, is surely a poor man's version of BASIC with some clever hardware tricks.

I suggest a generic tutorial based around successful software engineering; programming is basically problem solving and requires an overall problem to be broken down into individual stages. Toby Simpson touched on such a subject in his C tutorials. The emphasis should be on design of a program not the coding of one in a particular language. Since, if the design is correct, the risk of errors is reduced.

How particular languages support data structures, modular programming and syntax of the basic building blocks of coding should also be covered. This will allow the user to make an educated decision as to which language to code in.

Graeme Blenkinsopp
Bishop Auckland, Co. Durham

We ran our AMOS tutorial as a response to readers requesting it. It is very difficult to include every element of programming in a six-part tutorial. However, we will bear your comments in mind for future tutorials. Readers' comments are always welcome!

A waste of money?

I read in Amiga Format that there is an incompatibility problem between some software and the floppy drive in the new A1200s. A hardware feature, the DSKRDY line, is not supported by the mechanism used in the machines. It seems that games, Citadel and Zeewolf 2, were only saved from incompatibility at the last minute due to quick action by AF.

Does this mean that my collection will be lost to me if I purchase a new A1200?

R. Hemmingway
Tooting, London

If you read our interview with Gilles Bourdin of Amiga Technologies in our last issue, you will know that they have arranged for a "little hardware fix that can be easily installed by the Amiga dealer upon request".

In praise of Dave



I have just finished reading the Shell feature in AS59. What an excellent piece! I used to think I knew a fair bit about the Shell but reading this article has dumped me firmly back in novice class. It is much more powerful than I imagined. And Mr. Taylor's article was eminently readable and therefore far more valuable than some incomprehensible and weighty tome.

Coverdisks, feature articles, Amiga Answers; is there no end to this man? Promise him anything, but don't let him get away. Chain him to his desk if necessary – I'm sure AS readers will send him food parcels (does he like Vegemite?).

Graeme Goodes
Australia

No, he doesn't like Vegemite, but he loves digestive biscuits. And shortcake. And anything with chocolate in it. Oh, and beer and burgers, of course. ■

Advertisers' index

The **essential** magazine for Amiga enthusiasts

AMIGA SHOPPER

Next **month**

Video

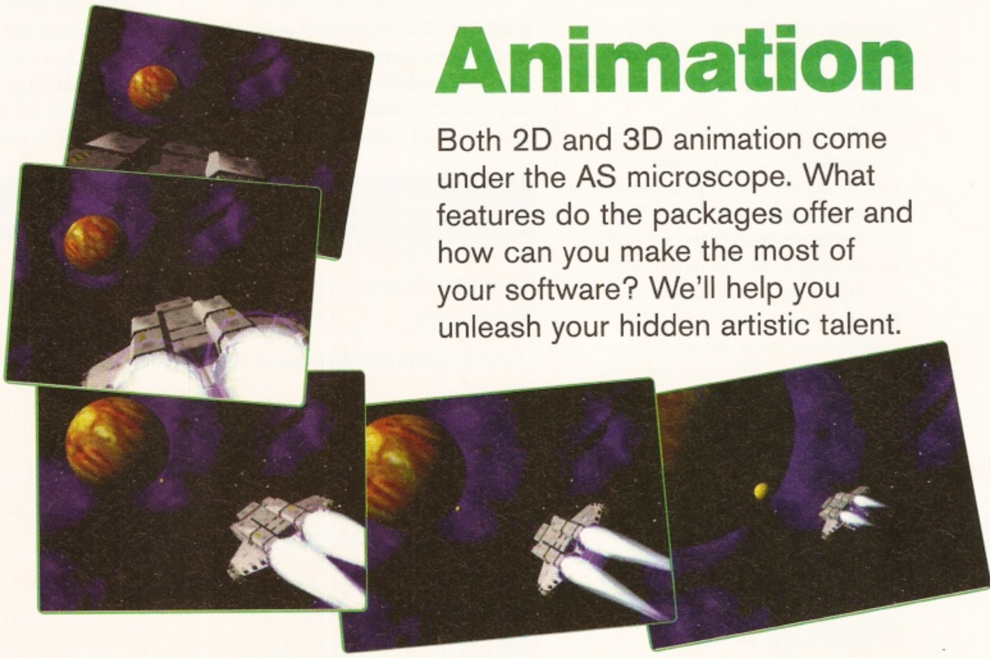


The Amiga is the cheapest way to get started in video. We will be looking at all the equipment used for anything from amateur video through to professional level. Everything from using just a plain Amiga to setting up a video suite. All you need to know.

Wordworth **5**

We loved version 5. Next month, we'll not only be looking at 5SE, but we'll also have an exclusive Test Drive version on our Coverdisks. It will be packed with as many features as can be crammed on and will enable you to load, create and save your documents. Of course, the disks will be packed with lots more stuff too.





Animation

Both 2D and 3D animation come under the AS microscope. What features do the packages offer and how can you make the most of your software? We'll help you unleash your hidden artistic talent.

Why not take advantage of our special six-month subscription deal? Telephone the order hotline on ☎ 01225 822511.

June issue **63.** On sale Tuesday, **30th April** 1996

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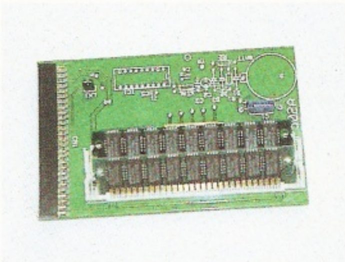
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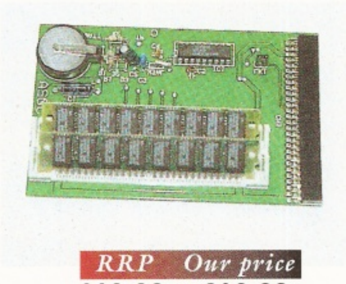
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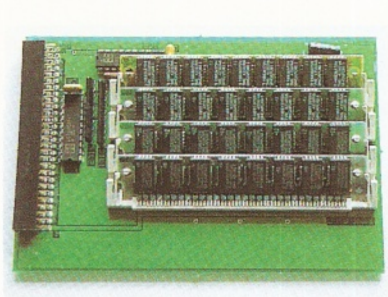
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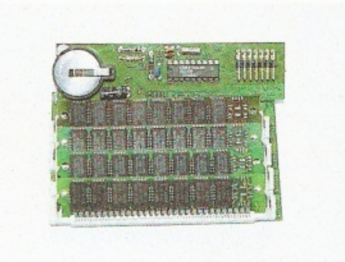


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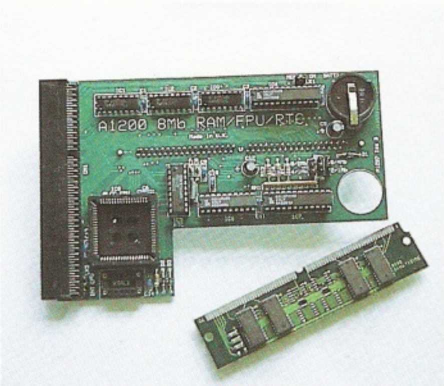
All prices include VAT and P&P

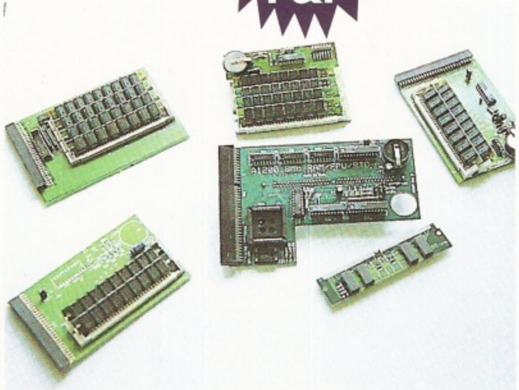




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Shopper**disks**

Yes, honestly, we are not joking. There really is the full £150 CanDo package on our disks, as well as a TurboCalc demo, other demos and essential PD and Shareware. 6Mb in total.



CanDo 2.51: complete!

We are going on about it a bit, but we are honestly so excited that we can't help ourselves. CanDo enables you to create anything from multimedia to application programs or games. You are limited only by your imagination. To get you started, we have a special feature helping you to get the most out of this amazing Coverdisk.

And when you've seen the power of 2.51, allow yourself to be tempted with the amazing £80 saving you can make on the upgrade to version 3!

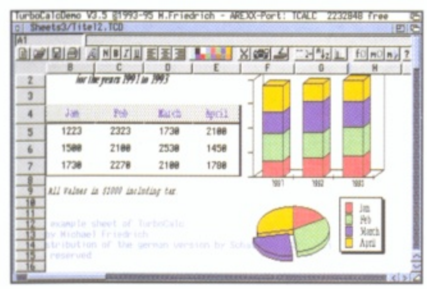


***Please note:* Because of the power of CanDo 2.51, it requires a hard drive.**

Master**ISO** demo

The program for real power users. Reviewed this issue on page 45, you can try out the new software that enables you to cut your own compact discs. With CD-R coming down in price, could this be the way forward for serious storage?

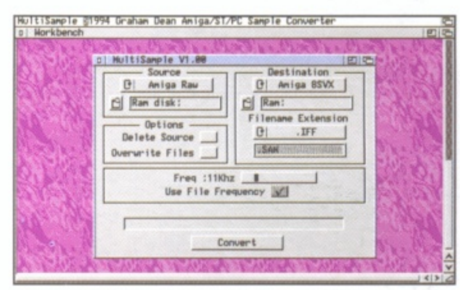
TurboCalc 3.51 demo



Popular demand has finally enabled us to get our hands on a demo for this popular spreadsheet program from Digita. You can now see for yourself the amazing power and versatility of this package. Example files and full on-line help will guide you through; when you've found out what it can do, you can save a full £20 off the retail price in our second exclusive offer.

Utility**Zone**

Two excellent utilities this month. One for converting sounds samples easily and quickly between different formats and the other for grabbing screen pictures. Utility fans won't be disappointed with the Technical Zone either.



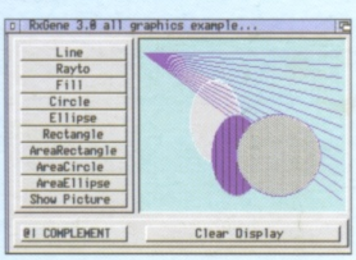
Shopper**Choice**

The disk that makes a tin of sardines look like a spacious, 20-bedroom flat occupied by a bachelor.

Application**Zone**

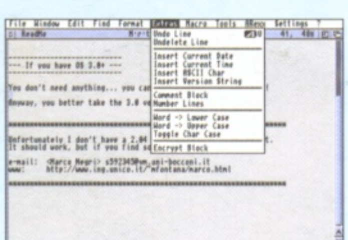
RxGene 3

A complete package that can automatically write the tricky parts of ARexx scripts for you. Also included is a compiler to turn your code into an executable form. This brings the power of the underused ARexx to your fingertips.



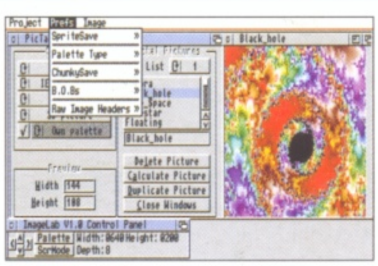
Blacks Editor

The new text editor that's already attracted a lot of attention. With amazing ARexx support, this version requires Workbench 3, but offers a whole host of features normally associated with commercial releases. Superb!



Technical**Zone**

Seven amazing programs that can make a real difference to your computing. XFD will unpack any type of crunched file; Guru 3 offers an English interpretation of guru meditations; Floppy is the new disksystem we raved about last month; LowFrag optimizes memory usage, and there's much more besides!



Programming**Zone**

Not just the code for the HiSoft BASIC 2 tutorial, but two excellent utilities for programmers. There's MenuBuilder that can create a menu through its GUI and then output the code for you; and PLab which can convert pictures into raw data for inclusion in programs as well as offering masses of other features.

Plus: *InformationZone: all you need to know.*

